

GAME BIRDS
AND
SHOOTING-SKETCHES.

J. G. Millais.





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GAME BIRDS
AND
SHOOTING-SKETCHES.



THOMAS BEWICK.

BORN 1753. DIED 1828.

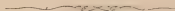
BY

SIR J. E. MILLAIS, R.A.

GAME BIRDS
AND
SHOOTING-SKETCHES;

ILLUSTRATING THE
HABITS, MODES OF CAPTURE, STAGES OF PLUMAGE,
AND THE
HYBRIDS AND VARIETIES WHICH OCCUR AMONGST THEM.

BY
JOHN GUILLE MILLAIS, F.Z.S. &c.



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The Most Noble

THE MARQUIS OF BREADALBANE,

A KEEN SPORTSMAN AND NATURALIST.

P R E F A C E.

As the following remarks on the four species of the Grouse family that inhabit our Islands are merely rough notes, mostly jotted down at the time of observation and collected together afterwards, the Author trusts that his kind readers will accord to them the generous criticism that such notes deserve, for they have no pretensions to literary merit or finished composition. Many of the sketches have also been more hurriedly completed than he could wish, as, owing to the calls of another profession, time to enter fully on the present subject has often been difficult to obtain. Should, therefore, the reader, be he sportsman or naturalist, find aught in this work concerning the beauties of Nature which may be new to him, the humble object of the writer will have been realized.

JOHN GUILLE MILLAIS.

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Painted by J. G. S.

Long. 10.000. Breadth 5.000. Height 1.500.

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CAPERCAILLIE.



APERCAILLIE, notwithstanding the improvements in shooting and modern shot-guns, now that they have become one of our birds of the chase, seem to be still slowly and steadily increasing, and in most of the places which may be regarded as their home in this country hard shooting, at any rate, does not seem to diminish their numbers. For though a great many, mostly hens, are annually killed in the low-lying woods of Perthshire and Stirlingshire, their places are generally filled up the following spring by birds which come down from the rocky hills that may be near and from places which will not admit of successful driving, of which there are many in these counties. Perthshire, Stirlingshire, and Forfarshire seem to be the counties in Scotland most suited to the habits of this magnificent bird, a few being found in Aberdeenshire, Argyllshire, and Fife, one having been killed in 1888 as far south as Dalmeny, in Mid-Lothian.

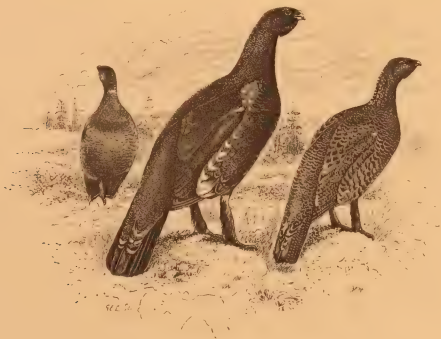
The ground Capers seem to like best is broken and rough hillsides, overgrown with larches and Scotch firs. There must also be good and varied feeding-spots beneath, where heather and mountain berries grow, and banks of fern and bracken where they can lie in hiding during the summer months. Such spots are to be found everywhere throughout the above-named counties. It is a curious fact that, although these birds have been several times introduced into Inverness-shire and Ross-shire, where everything seems to be in their favour (in addition to those counties being their former home before re-introduction), they do not thrive, and the birds, after being carefully preserved for a year or two, have totally disappeared.

Their affection for certain places, which at first sight one would little imagine were frequented by them, is sometimes most extraordinary. There is a little wood, quite twenty miles from the

nearest Caper ground proper, and situated out in a barren and desolate tract of sand-hills on the coast of Fife, which for a great many years has been inhabited by Capercaillie; and I often wondered how they originally came there, until, one day, I met a brother gunner shooting on the estuary of the Tay, who told me that he had once seen a cock Caper crossing from Forfarshire to the Fife side, where the wood is situated. This must have involved a flight of at least seven or eight miles (no mean journey for a game bird). Mr. Speedie, who owns this wood on Tents Muir, where I have spent many a pleasant day after Snipe and Woodcock, tells me they never increase or diminish, probably owing to the young cocks wandering in search of "pastures new" when they are able to look after themselves.

On the whole the Capercaillie may be called a shy bird, especially the old cocks; but during the autumn even these sometimes become quite tame, and a field of oats near their haunts is an almost sure find for them in August and September. At this time of year the crack of the beater's stick and report of a gun have become a memory of the remote past, and in addition to which the abundant feeding that surrounds them is too good a thing to be left at once on the first indication of danger. I have seen them sit on a paling by the roadside till a driver cracked his whip at them, when they would reluctantly flop off a few yards into the field, where they would stand upright, like turkeys, till the disturber of their peace had passed on*.

When surprised in open ground, and the danger is not such as will immediately put them to flight, they often stand in the erect position I have endeavoured to show in the sketch, for a



CAPercaillie SURPRISED IN THE OPEN.

considerable time. One Sunday, when walking on Craig Vinian, near Dunkeld, I disturbed a cock and two hens, which were regaling themselves on the blueberries that abounded on the hillside. They stood perfectly erect and motionless for fully ten minutes, until at last I thought they must have become petrified in their upright position, when one of the hens

* I remember one summer evening, when returning from trout-fishing in Rohallion Loch, I came across a hen Caper sitting on the wall which surrounded a cornfield on the Murthly march. I thought I would try and see how near I could approach her, and almost succeeded in touching her back with my fly-rod before she thought it time to move off.

gave a short "cluck" and recommenced feeding, evidently satisfied that I meant them no harm; but not so the old cock, who, with a slow dignified step, stalked up to the top of the nearest rock, from which he could obtain a good view all round, and stood there watching me till I was out of sight.

It is not often that the Caper resorts to lying close until the danger is past except in the early autumn, when in the fern-banks and feeding on the wild raspberries, or when wounded. In the former case they often sit so close that the dogs catch them before they can rise above the bracken. This power of remaining perfectly still to elude observation is a wonderful faculty of the Game Birds, and their instinctive knowledge in selecting ground and surroundings which are in exact accordance with the colour and markings of their own plumage is a merciful boon which Nature has beneficently provided for their safety. How well does the little Partridge know that, though he is crouching on the open clay of a stubble-field with but two or three straws or blades of grass around him, he has as good a chance of escaping unobserved as if he were hidden beneath the thickest cover! So, too, it is extraordinary to see in what a scanty cover a large bird like a cock Capercaillie can hide himself without being discovered. It is a common sight to see an old cock come tumbling down with a broken wing amongst the short heather and utterly baffle the efforts of two or three beaters to find him. They come up and stamp down all the ground round about the spot without success, and then, after a considerable time has been wasted and the scent destroyed as much as possible, with much shouting and yelling a "düg" will be brought up, who will at once pick up the lost one from amongst their feet, much to their astonishment.

Notwithstanding the size and shape of the wings of the Caper, when fairly launched in the air its flight is both graceful and rapid, the bird at times moving as fast as any one could wish, as far as shooting purposes are concerned. I have on several occasions seen Capers approaching a line of guns, in company with Grouse and Blackgame, and noticed with what apparent ease they held their own, flying about the same pace as the other two species, but with apparently half the effort, giving now and then two or three steady beats of the wing, a little slower than Blackgame, and then sailing for a great distance. When passing over roads, drives, or small clumps of trees, which they think are dangerous, they often adopt a peculiar swinging motion of the body, which renders it easy for them to shoot off in whatever direction they can best avoid their enemy. It is not an uncommon sight to see hen birds, on observing the gun, make a sudden dive towards the earth from the tops of the trees from which they have just emerged, and dash past the shooter, quite low, often rendering a successful shot impossible, until about to enter the cover behind; but in places where Capers are seldom driven, this is of rare occurrence, the bird generally passing overhead in a quick decisive manner. It is only where the birds have been frequently driven, and the chance of seeing their dreaded enemy has become a painful certainty, that they adopt this strategy. It is the means, however, of often saving their lives, for if the shooter is not on the look-out for this little manoeuvre on their part, and is very "nippy," he is apt to find he is too late. As a general rule, when the Caper has determined as to what is to be his line of flight, he seldom diverges from it, even though he has to run the gauntlet of a line of guns which he can see perfectly. Then his flight is bold and unwavering, and he cannot fail to create respect in the hearts of his would-be slayers, as he sails onward, having received the contents of the last barrel in his back without a quiver.

Capercaillie, when travelling from the low to the high grounds, generally find it necessary to make one or two wide circles in the air before leaving the old ground altogether. This is performed in order to give the necessary elevation for their point of alighting, so that they do not have to rise

during their flight; they never seem to be able to fly up-hill, except on a very gentle slope. It is a beautiful sight to see one preparing to start on a long flight. I once watched a hen thus, on a still autumn evening, as she rose off a larch on the high cliffs above Stenton; after taking two or three little circles in the air, as a sort of preliminary canter, she started off again in circles growing wider and wider, and having reached an elevation of about 200 feet above the cliffs, she went off in a bee-line for "Craigie Barns," a hill about five miles distant.

When disturbed on hilly ground, they rise clear off the trees and either proceed in a direct line or incline slightly down-hill, flying forward in this manner till their journey is ended by their pitching in some tree or on the ground. It sometimes happens that they suddenly find themselves at the end of the cover, with no other place of refuge within reasonable distance. In this case they swing at great speed up the hillside, skirting the tree-tops, apparently borne forward by the impetus which their flight down-hill has given them, and, flying back a short distance in the cover, will alight within a hundred yards or so of the edge of the wood. This is about the only time the Caper makes any noise in flight, for, as he goes by you with a "swish" like an express train, you find it difficult to associate him with the bird that usually glides by like a ghost, and which takes all your perceptive faculties to observe at all. When passing directly overhead, the noise produced by their wings resembles that of a Wild Duck, but scarcely so loud. If the wings are not being beaten, there is absolutely no noise. The hen bird can, as a rule, rise neatly and without much labour from the ground; but the cock is not quite so graceful, having to take two or three steps to launch himself into the air, and then his flight is accompanied by some heavy and clumsy flapping before he is fairly under weigh. After heavy rains or snow, if they should be surprised in deep heather, I have seen cocks totally incapable of rising, so that the dogs have run on to the unfortunate birds before they have gone a dozen yards. There is a wood at Dupplin where this often happens, for Capers seem to resort thither to the deep heather during wet and stormy weather, and, if surprised in this situation, it is difficult to instil into the brains of one's canine friends that this mode of capture is not exactly a legitimate form of sport.

I was much amused one day at Strowan, in Perthshire, when I was placed forward in a wood, waiting for Caper, at seeing two cocks, which had come forward but were out of shot, to my left, alight about 30 yards behind one another on an open glade in the middle of the wood. Immediately they saw me both in turn toddled gravely up the hill till they judged they were safe, and having climbed on to a nice high bank, looked round and round, and once more resumed their journey onward*.

Capers, whilst in the air, generally fly at such an altitude as will enable them to keep clear of the highest trees, and seldom are out of gun-shot from the ground, except when it happens that they are strangers to the place and meditate a long journey home; then they will put themselves out of reach of their persecutors at once, and move off at a height of 200 or 300 yards. Occasionally their line of flight takes them across gorges and valleys, which, of course, puts them altogether out of range, and for this reason some woods which are full of birds are shot annually with poor success.

As a general rule, in Capercaillie-shooting one's eyes will be found to be most useful, and one has to keep every sense of observation strung to the highest pitch to detect the approach of the birds. It is this, perhaps, that makes the sport of Caper and Blackgame driving in cover so

* This betrayed on their part a fine sense of reasoning, for they knew that if they had again risen and resumed their journey their flight would necessarily have to be down-hill, and consequently towards me. So by thus ascending the hill they put such a possibility out of the question.



DRIVING CAPERCAILLIE.

intensely fascinating; for all the other species of game give you due warning of their approach, or resort to open land, where they can be seen advancing for a considerable distance. It often happens that, although the shooter may have been watching most intently to his front, an old cock, nearly as big as a turkey, has slipped past him like a ghost within a few yards, without the shooter, who, perhaps, is keenness itself, having even observed him. This does not happen once or twice, but frequently; and it is very amusing to hear the different comments made by the guns, the drive being over, as to their respective ill-luck at not seeing anything. On one occasion a friend of mine was very anxious to slay a cock Caper: after several unsuccessful beats, where he said no birds had come forward to him at all, we put in a pass on a road intersecting two woods. There we knew it would be a perfect certainty that the birds would cross. The beat having commenced, in glancing down the road I had the satisfaction of seeing first a cock and then a hen go gliding up to him; but of neither of these did he take the slightest notice, and was quite pleased when he killed the next bird that came to him, being perfectly unaware that any others had passed him at all.

The Capercaillie is a bird whose powers of flight must by no means be underrated, for many a man who is a good shot has gone out with the idea "that any idiot could hit a bird that size," but has returned with the fixed intention of treating the cock of the woods in future with the proper amount of respect which is due to him.

Owing to a cock Caper in the Natural History Museum at South Kensington having been stuffed with its legs drawn up to its thighs, there was for some time a discussion amongst naturalists as to what was really the correct position in which the legs were carried during flight. Some naturalists affirmed that this attitude was correct, and others that the legs were straightened out behind under the tail, after the manner of Ducks, Waders, &c. At any rate, the unfortunate specimen, which is most admirably set up, was subjected to a considerable amount of pulling about before it was finally settled that the legs should be kept drawn up. Had the bird been rising instead of sailing, as it is represented to be, I should have thought this position quite correct; but, in my humble opinion, they should be stretched out; for after carefully watching Caper for a considerable time, I have been led to the conclusion that they in no way differ from Pheasants and Partridges in this respect, namely, that the feet are drawn up close to the body until the bird has attained the necessary elevation at which to pursue his flight, and then stretched out. One day I spent entirely with a man standing beside me to watch as minutely as possible the portion of the body from which the legs seemed to fall when the bird was shot, and it was a long time before any opinion could be formed at all, for very good reasons—Capers were scarce, and it is not one in every six that comes near you; in addition to which, if the bird is flying at a good pace and is shot stone dead, there is little or no movement on the part of the legs, as the back is paralyzed. However, a good chance at an old cock eventually offered as he sailed past within twenty yards, and in my anxiety to shoot him where I could see his motions clearly when I fired, I contrived to hit him in the back, which was really about the best thing I could have done, and his legs seemed to me to at once drop from below his tail as he came gradually to the ground some thirty yards behind. I accordingly asked the keeper, who is a most observant man, without letting him know what my opinion was, and found that his ideas coincided with my own. But this was hardly conclusive enough, so I spent the next days we were shooting the woods and scaring the Capers in lying flat on my back, watching them as they passed overhead, with the same result. But here again arose another difficulty, from the fact that the feathers on the bird's legs were the same colour as those on the stomach, which rendered an accurate view by no means certain.

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The Capercaillie is but a poor performer once he gets on the ground, for his running powers, unlike the rest of his species, are of the feeblest description. Both Grouse and Blackgame, when wounded, will occasionally put a very considerable distance between themselves and their persecutors, if given time to do so; but the Caper seldom moves many yards from the spot where he has fallen, and prefers to creep into the first stump or inequality of the ground that presents itself. Nothing ever seems to really startle or frighten them, for every movement they perform on the ground, or when sitting in a tree, is carried out in a slow and deliberate manner; hurry does not seem to be any part of their composition. Should you suddenly come under a fir-tree on which there is one sitting, he will take a good look at you with his neck stretched out, as if wondering what you were disturbing him for at that time of day of all others—just when he was taking his dinner, too! he will shamle up the branch, push out of his way the branches which would obstruct his flight, and deliberately throw himself clear, dropping like a Cormorant, till the air has inflated his wings sufficiently to carry him away. So, too, one cannot help admiring the delightful *sang-froid* which he will sometimes display when, after falling head over heels into an open field, he slowly gets up and proceeds to shake himself, after which he will perhaps have a look round at things in general and then at himself in particular, as if to ascertain whether it was any fault on his part that had occasioned the unforeseen accident and soiled his best and only coat. Then he will discover that his wing is dragging on the ground and is useless; whereupon his natural instinct will lead him to make himself as scarce as possible, which he will accordingly do by strolling in a cool, leisurely manner to the nearest furrow, and, squatting therein, the poor bird soon breathes his last!

In places where the Capers are much shot one but seldom has opportunities of observing them in anything like fairness; for once danger is known by them to be on foot, there are few birds that understand how to look after themselves better than the cock of the woods. Occasionally one will surprise them in trees, and then one has a good opportunity of observing their movements and habits for a few seconds before they take their departure. On one occasion, at Murthly, I remember when I was out by myself and the keepers beating some woods near the Castle for an old roebuck, which had escaped for several years, that I arrived at a small pass at which I was to stand whilst the men worked up in my direction: there I noticed the branches of a large Scotch fir within a few yards of the place where I was standing swaying about in an agitated manner; thinking at first it was only a party of squirrels, which literally swarmed in the woods, I took no notice of it, until at length there appeared the head of a bird I knew so well, quietly nipping off the young shoots at the ends of the branches. Putting down my gun, and forgetting all about Mr. Roebuck, I got into such a position that my friend was out of sight behind the trunk of the tree, and crawled on my hands and knees to the foot of the tree. My journey was but half completed when I discovered, by the flapping of a wily old cock as he made off, that the one I had seen was not the only occupant, for, on peering cautiously round the stem, there, to my delight, were no less than five others all busily engaged on their evening meal. It was ten minutes before the keepers came up, and in that time I think I learnt more about the positions and attitudes of the bird than I have ever done since. Though they never once thought of looking down at me, it was very interesting to notice the simultaneous manner in which they all stopped feeding on the first warning crack of the beater's stick.

On another occasion, I was running down through a little wood where the firs were not more than 20 feet in height, when I surprised a full-grown young cock, who came as near evincing anything like hurry that I ever saw one do. He never looked to see if he could get a clear flight above him, for I was under the tree and there was a dense spruce-fir on the other side, so he made two blundering ineffectual attempts to force his way upwards, before he eventually came to the conclusion

that the orthodox method adopted by his ancestors was the only reliable manner in which to escape. This he succeeded in doing so well that I thought at first he was going to break my head as he came bowling down at me, so that I involuntarily dodged out of the way. The effect of a bird like a cock Caper, weighing as he does from nine to twelve pounds, striking a man would be very damaging, when a small bird like a Grouse, weighing a little less than two pounds, is sufficient to stun a man or knock him head over heels. (There was an account in a sporting paper lately of a man who had been knocked over whilst the bird spitted itself two feet down the barrel of his gun.) At any rate, some very near shaves are seen at times of shooters being struck by them, and I should be sorry to be the one on whom such retribution falls.

At the commencement and during stormy weather, Capers are very unsettled and are constantly on the wing. This applies more to the birds in the higher ridges and open larch-woods; and should the gale be of any duration, they will resort to the thick cover on the low grounds, even though they have to travel considerable distances to such places. During the last week of November, 1888, a friend of mine, who was most anxious to shoot a brace of Capers, went to Murthly, to try and procure them, which, under ordinary circumstances, would have been a certainty, as he was a good shot and a keen one to boot. However, as bad luck would have it, the woods seemed almost destitute of birds, and the few shots he did get were hard, so he failed to score, and the next day he left, much disappointed at his ill success, as one does not get Caper-shooting every day. All that night, however, and the next two days a fearful storm of wind and snow raged, after which I took my friend up from Glasgow again to try his luck once more. We were met next morning by James Keay (our old keeper and the most genial and good-natured creature ever created), who gave us the pleasing intelligence that on the previous day, when looking for a wounded Roe, he had found the Capers in one or two thick parts of the woods "fairly swarming."

The day was unusually calm and still, as is usual after a gale, which no doubt accounted for our seeing but very few birds until the afternoon, for they had probably availed themselves at once of the opportunity to return home now that the winds had gone down again; they had not all gone, however, for on driving quite a small corner of thick firs no less than fourteen came forward over one stand, though how many went out at another corner, at which there was no gun, it would be hard to say. Also, in another part of the woods we found a large number together; some could be seen sitting high on the tops of the firs looking about them, meditating a start for the home they had left up amongst the rocks of Rohallion. We hardly got a shot at these, as they moved off long before the beaters had begun to advance, and we were just getting into our places; they evidently had no intention of waiting in a place where they could see their deadly foes collecting on both sides of them. It must, however, be a very severe gale that drives them from their usual haunts, for, as a rule, the rocky hillsides to which they resort are to a great extent shut in by other hills, which form for their homes a natural protection; thus it is of rare occurrence to see the birds changing their ground for shelter, and on those occasions when they do, Capercaillie may be said to be gregarious to a certain extent, whereas, as a general rule, one does not see more than a family party together.

On a fine still day the birds seem to like to resort to the high trees on the edge of their domain, and it is a common sight in autumn or winter to see three or four, generally hens, sitting on the ends of the branches, whilst they trim their feathers and backs in the sun. Weather seems to have much to do with the movements of the Caper, for on such days as these they will betake themselves to great distances from their home to make havoc on the cornfields in the neighbourhood; but I do

not recollect a single instance of seeing them feeding in the fields during wet weather. Grouse and Blackgame seem to be but little affected by wet weather; they come into the "stooks" as readily then as they would any other evening; but Capers seem to manifest a much greater disinclination to move from the woods and the deep heather, in which they are generally to be found, on wet and stormy days.

The Caper changes its ground in search of fresh diet, as do nearly all other birds, and low-ground woods which one day may be known to hold a large number of birds are comparatively deserted the next without any apparent cause. Shooters, who have experienced this grievance, can well understand how annoying it is to see covers, which they knew a few days previously were teeming with birds, a day or two after utterly destitute of living creatures of any sort.

This partial migration usually takes place just at the very time when you think the auspicious moment has at length arrived when you are going to have a "field-day" amongst them; and many a shooting tenant has returned home on the evening of an unsuccessful day and given his keeper a good all-round "talking to" for saying there were heaps of birds when the reverse was the case, whilst the guests have departed inwardly anathematizing Caper-shooting and voting it a snare and a delusion. But, perhaps, this delightful state of uncertainty constitutes half the charm of this sport; for it is no matter of surprise to a man who is accustomed to it if no birds come forward, and when he has a really good stand at which he gets a number of shots he knows thoroughly how to appreciate it; and he who is not prepared for disappointments at those times when he has probably formed the most sanguine ideas of success is not the one for this truly noble sport.

Sometimes the birds will remain away on the hill-faces for a month or two before they return. There they get abundant feeding among the larches and are loth to leave them for the acorns and beech-mast that they get down in the woods below during winter. But things generally manage to balance themselves in the long run, for the low-ground birds bring with them a few of their friends with whom they have lately been staying, thus more or less equalizing by the end of the season the number of birds killed by each separate proprietor.

The unfortunate Caper is unjustly accused of a great many heinous offences of which I for one believe him to be entirely innocent, though there is no doubt he takes off the shoots of the Scotch firs and larches which come within his reach, and which does very little damage to trees that have already reached any size. But many sportsmen and owners of forests affirm that their choicest morsel is the topmost sprig of a young spruce-fir: no doubt it may be; but how is Mr. Caper going to get it, unless he hovers over it like a Flycatcher, and nips it off in his flight, which, from his physical construction, is a moral impossibility, and there are few spruces that would bear his weight anywhere within reaching distance of the top. For when the trees are small and it would be possible for the birds to reach them, they are generally surrounded by wire netting to keep the rabbits off, and, if not, the little fellow on four legs is more likely to have done the deed than his two-legged companion. So it ever was: "give a dog a bad name." You have only to suggest to a forester that it merely wants Capercaille to make those magnificent woods of his complete in their natural beauty to see him "spread" himself and call down a torrent of abuse on the head of that unfortunate fowl. Neither do the farmers love him, having caught him, perhaps, one fine evening enjoying a little bit of fun all by himself; for Mr. Caper, after having finished his dinner, will sometimes indulge his irrepressible spirits by knocking over a "stook" or two and pulling them to pieces out of pure "cussedness," for he is somewhat of a humourist. This naturally leads to unpopularity, and the owners and tillers



CAPERCAILLIE (TETRAO JINCA)

Three capercaillies assuming the Plummage of the Male Bird, from Specimens killed near Pooh, N.B.

of the soil having got it into their heads that he is a scoundrel, he has no one to love him but the sportsman, who exhibits his affection for him by shooting him with a chokebore and No. 4 shot.

On the whole, Perthshire and the surrounding counties, where the bird exists in numbers, are proud of their acquisition, and the Caper there thrives and remains; for in every case where they are turned down, as before remarked, they do not thrive but gradually disappear. In other places where they would do well, Speyside for instance, the proprietors will not have them at any price, on account of their alleged destructiveness, and use every means in their power to keep them from becoming established. Some big game-preservers object to them on the ground that they will drive off and kill, if they catch them, any cock Pheasants that come near their haunts during the fighting-season. One can well believe this; but there is that little word "if," which is small but means so much. I think most people would say that a cock Pheasant is quite able to take care of himself against any bird, as his running-powers and agility far exceed those of the Caper. Still the idea has gained ground and has taken a strong hold in the minds of some old keepers in Perthshire, at any rate; and they have so persuaded their masters, who probably think that because a keeper has been keeper all his life he naturally knows all about them, that they invariably give orders that any one of their men who finds a Caper's nest shall at once put his foot upon it and destroy the eggs. This is decidedly rough on the poor Caper, for most sportsmen who go about much and chat with keepers concerning their work will have noticed how perfectly astounding is the ignorance sometimes displayed by men who have been all their lives with nature around them, and yet do not know the names of the commonest birds and trees which they see every day, and who go on year after year beating this wood, or driving that moor, in a way that almost sets your teeth on edge, causing you to wonder how a man can be such a consummate idiot as to try and perform things that are utterly adverse to all laws of nature; and he will go on doing it, teaching his children to do the same, for his father before him has taught him so, and that is all-sufficient. But fortunately there are plenty of those, on the other hand, who have brains and think for themselves: it is a common thing to meet with men who pay some attention to, and have a natural love for, the beauties which surround them, and which are daily forcing themselves under their notice. Such men are a pleasure to meet wherever they are, and are always good keepers as well, for they take trouble and set themselves the task to find out the reason why things are so, and when anything goes wrong, persevere to solve the difficulty. To meet such a one is a treat, he is generally one of nature's gentlemen and commands your respect, whereas the other only teaches you how poor the English language is in powers of expression.

But to return to the subject of the Caper. With the exception of the one month in the year when the male is engaged in his love-song, both sexes are extremely silent, never uttering any note but the usual "coq coq," which has to do duty as a call to one another as well as to indicate the presence of danger. The hen calls in this manner when wounded and running away to escape man or dog. As one approaches to pick the bird up, whether cock or hen, it will give vent to a peculiar loud hissing noise, at the same time distending all the feathers of the neck and looking somewhat fierce before you can lay your hand on it, though in reality it will evince no more ferocity than a Partridge.

The formidable appearance of this grand bird when winged has allowed many a sportsman's imagination to get the better of his veracity. One occasionally hears such remarkable and thrilling accounts of the savage nature of the cock Caper when wounded, and such stories of hair-breadth escapes from the beak of the infuriated bird, that one really begins to wonder why the Caper is so prejudiced in selecting the objects of his animosity, by always choosing those unfortunes

who have only bearded him in his native haunts perhaps once or twice, and that he never seems to think it worth his while to attack men who are probably after him nearly every day in the shooting-season, and who may have been compassing his destruction for years; at any rate, I know thirty sportsmen at least, and as many keepers, who have been all their lives shooting Capers and who never yet saw one offer the slightest resistance.

Seven or eight years ago, a very distinguished and well-known Member of Parliament (who, if he ever reads this, will probably get a bill passed excluding all naturalists and other irresponsible persons from voting) was staying with us, and, being most anxious to slay a cock Caper, was accordingly put in the best places in the drives to try and effect this. After several shots he succeeded in winging an old fellow, and from the account he gave us of the unprovoked assault the dastardly bird had made on his person when he went to pick it up, we began to thank Providence for having been pleased to spare for the benefit of his country one of the most brilliant ornaments this age has seen. This naturally excited one's curiosity to see the daring scoundrel, and after advancing to the spot where the bird was last seen, not without a considerable amount of caution, he was discovered concealed in a drain in the wood, from which he was extracted, and attempts were made to again excite his bellicose disposition, but, alas! without success. Perhaps the prickings of his conscience had been too much and remorse had seized upon him for his recent conduct, and he had given way to despair. Still it is hardly fair to make statements without thoroughly sifting both sides of the question, and, like Mark Twain's character, who affirmed that no one could be positive in his assertion that a buffalo was unable to climb a tree, simply because no one had ever seen one of those animals try to do so, so is it quite possible that these birds may at times attempt to defend themselves. I know another gentleman—an excellent naturalist—who declared to me that once on going to kill a cock, which was ensconced under a spruce-fir tree, it had rushed out at him and snapped in two a little stick which he was holding in his hand and with which he was endeavouring to oust the bird from his position. He is a man well known in sporting circles in Scotland, and would not make such statements unless they were true.

Perhaps no bird is so little poached or so little interfered with in any way, both on account of its scarceness and its very small marketable value, as the Caper, and a poacher would have to be a very smart fellow indeed to make any success in trapping them. In this country one may say they are never killed in any way but by shooting, and for an account of all the ingenious devices used in Norway, Sweden, and Russia for its capture by snares, I must refer my readers to other works on the subject, as these few notes of mine are intended to be entirely in the "rough" and are innocent of the scissors in furnishing elaborate accounts of what I have never myself seen.

Not being regarded amongst the Game Birds proper of Great Britain, the Capercaille has no special time assigned as to the commencement or termination of the shooting period. It can therefore only be looked upon as one of our ordinary wild birds, and may therefore be shot from August 1st to March 1st. This is a great pity, as numbers are annually killed in the first two months of the shooting-season, when they afford no more sport than Water-hens do, though perhaps they are rather better for the pot. In places where the shooting of them is regarded as an institution they are never killed, nor should they be, before the month of October, thus giving the birds time to assume the full beauty of their plumage, and give the sportsmen the satisfaction of picking up a really handsome bird, instead of a lump of half-grown flesh and feathers. No good sportsman cares about fighting his way through undergrowth and banks of ferns five feet high, to butcher birds in a half-moulted condition, which rise at his feet and go slowly flapping away, though many are killed in this way every year. A rocketing cock Caper that comes crashing down through the

DAWN.



crag and fir amply repays the proprietor for having stayed his hand and those of his friends by giving his birds a two months' grace.

To those who are fortunate enough, and have the opportunity of indulging in it, Caper-shooting offers charms not, in my humble opinion, to be surpassed by any other form of sport in this country. Not only is it extremely fascinating in itself, requiring on the shooter's part the utmost observation, quickness, and precision in order to attain success, but the main charm, perhaps, lies in the magnificent surroundings and scenery in which the sportsman is thrown, and lovely landscapes, second to none in the universe, that are spread out before him like a map as he stands on the hillside awaiting the commencement of the drive. Can there be anything more delightful to the heart of the true sportsman, as he sits snugly behind some fallen tree or boulder, on a bright winter's morning, and draws the keen frosty air into his lungs, feeling the blood mounting to his cheek, than to let his delighted eyes wander over the distant landscape down to the winding river that creeps on like a silver streak far away in the valley below? A feeling of content steals over him and overcomes any little internal resentment that he may have felt for a moment in having been forced to climb to that lofty perch. Peace and quietness reign supreme around him, and the funereal silence of the woods is only broken, now and again, by the perky little squirrels casting down the fir-cones in wanton sport, running and gambolling about in front of him, as if fear were to them a thing unknown. Ever and again a faint breeze will stir the topmost branches of the trees and waft the fragrant incense of the pines towards him, so that he feels he is amply recompensed for all those long and weary office-hours he has spent in the City, and it is worth the toil twice over to spend such moments as these. Now he can at any rate shake off the worries that have oppressed him, and from which no man is free, and can take Dame Nature by the hand and she will put on her loveliest raiment for his special edification whilst they wander fancy free together. He sits watching her varied beauties with feelings that would do justice to a Sunday-school teacher, till the heavy flappings of one of his would-be victims as he alights on a tree warns him that it is time to turn his attention to grosser things and the destruction of one of the most beautiful of the fair Lady's works he has so lately been admiring. Such, alas! is the inconsistency of human nature—one moment to admire, the next to destroy!

Never can I think of Caper-shooting as it should be, in all its perfection, without my thoughts running back to one or two happy days spent in a certain grand wood on the hill-slopes of the Tay, above Ballinluig, near Pitlochry—where, indeed, shooting *par excellence* is to be had, not only on account of the number of birds always to be found there, but from the sporting shots one is sure of getting and which very soon test the shooter's skill with the weapon of death. Within about two hundred yards of the south end of the wood there are placed the two best stands, one a shelf of rock on the top of a little precipice, at the foot of which the other is situated. On this higher spot the sportsman, when he has had time to recover his breath after his recent exertions in climbing, can look around him and see about as lovely a panorama stretched out before him as can be found in Scotland, which is saying a great deal. A Sparrow-Hawk that comes sailing by, skirting the tree-tops, looks an uncommonly long shot away below him, and he involuntarily steps back a pace or two from the brink, as he thinks how easy it would be for him to slide over the edge of the rocks if those slippery pine-needles were only given half a chance. He must keep his gaze steadily directed towards the north, for that is the direction from whence the beaters are coming a distance of nearly two miles, and he will not have long to wait ere he sees something like a little black speck that every moment causes its identity to grow into a palpable form, and he knows that the drive has begun.

How well do I remember the first time I stood on that delightful spot, for hitherto my experience with the Capers had been mostly confined to the low grounds, where the chances of good "Rocketers" are rare, most of the shots there being quick low ones over rides or Scotch firs.

The first bird to come along the face, and which I saw approaching for fully half a mile, was a grand old cock. I was lucky enough to kill him well out, and, leaning over the rock, watched him drop for 200 feet till he fell crashing down into the "quarries" below, carrying away the rotten branches of the larch and fir in his descent. At lunch that day we had twenty of these magnificent birds laid out on the hillside besides other game; and what a laugh we had at one member of our party who insisted on claiming a large portion of the bag as his share, he having, previous to our start in the morning, confided to our host's son that he had never handled a gun in his life, and from whose cartridges the latter and myself took the precaution to abstract the shot for the safety of the community! After lunch we had another ten or fifteen birds. This would be considered a very good day at Capers, though as many as seventy have been killed in one day on the Dowager Duchess of Athole's ground near Dunkeld.

When driving woods for Capercaillie it is necessary that strict silence should be observed whilst the guns are being posted. Many a good beat has been spoiled by neglect of this precaution. The host should do his best to impress this on his guests before starting, and convince them that their own sport as well as that of all the rest may depend on their cessation of talking when moving to their posts, and quietness on their arrival there. No bird takes alarm more easily or is more quickly on the alert when danger is suspected than the Capercaillie, and being gifted with a more than tolerably level head for a bird, he comes to the conclusion (having turned over the state of affairs in his mind) that there is as much danger to him in proceeding forward as in breaking back.

Besides his natural watchfulness, the nature of his dwelling-place also helps to keep him in comparative safety. The crack of a rotten stick or falling of a fir-cone is heard to a very considerable distance in the still, echoing woods; and should he be seated on a tree-top, which is very often the case in the winter mornings, and the weather be fine and frosty, he will not take long to determine which of two evils is the less, and will decide in favour of the orthodox clamorous boy, who generally begins to yell as he sees a gloomy form vanishing behind him, and will soon make himself scarce, under the impression that the next parish is close quarters for the modern shooting-iron! But the boy's frantic cries and waving of arms are of little use, even should he see the bird approaching, for when the Caper, like the Blackcock, has once made up his mind as to what line he is going to follow, it needs a small army of beaters to turn him, such as he never has to encounter.

When such incidents occur, it generally happens that the birds, having taken in the situation, sit still on the trees or on the ground, as the case may be, and remain till the beaters make their appearance, and then they fly forward, and either alight within a hundred yards or so of the guns, whose position they know exactly, and from whom they break back over the heads of the beaters when the proximity of men on both sides becomes disagreeable, or they will wheel in their flight, soaring out to either flank, and pass away back, re-entering the wood at some point where they know they will not again be disturbed.

The foregoing remarks apply rather more to the cock birds, for the hens are at all times less wary and suspicious, though occasionally they may become quite as cute as the other sex, if frequently driven. But it is more common for them to come forward, and on sighting the guns, of whose presence they are perfectly aware, resort to the peculiar diving flight before mentioned.

In beating for Caper, a small number of men who know their work is all that is required,

and often half a dozen, who understand the flight of the birds and the dangerous point where it is likely they may break back, if not properly flushed, can perform more than a host of boys and irregular hands, who will not hold their tongues, thinking all game alike and only requiring a good frightening immediately it is on foot. The beaters should be placed at intervals of from thirty to one hundred yards, according to the number available and the nature of the ground, and being under the orders of one good man in the centre, should advance tapping the stems of the trees, being careful, above all things, to keep as perfect a line as possible; it is not numbers that are effective, but uniformity. This tapping on the trunks seems to have a most stirring effect on the Capers, and not a single one will sit on the neighbouring trees after they have heard the sound, whilst those sitting on the ground always follow the line of flight adopted by the others when any have passed over them.

When beating strips of wood on a hillside that are not very broad, a gun walking along parallel with the beaters, about fifty yards ahead, will often get very pretty shooting, as a number of birds will generally break down-hill to a point about this distance ahead, whether it is their intention of breaking back or going ahead clear of the wood; but should there be birds sitting on the trees near the summit of the hill, they nearly always go forward. I cannot remember ever having seen a Caper turn in front of the beaters on a hill-top and circle back, except when the end of the cover had been reached and there was no other means of escape open.

Capercaillie when mortally wounded can hardly be said to tower, after the manner of Grouse and Partridges, but seem to be suddenly arrested in their flight, and tumble head over heels till they reach the ground with quivering wings. The shock that Capercaillie will stand, particularly the cocks, is very great, if not hit well forward. When struck in the head or neck they drop at once, and are quite as easily killed as a Partridge even up to forty and fifty yards; but when the shot is placed too far back, unless the bird is so near that the pellets have not spread, they will carry on for a great distance, and are in most cases lost, although apparently "cut to ribands." Many sportsmen advocate shot from No. 1 to No. 3; but in reality No. 4 is quite large enough, and if properly placed is more effective than the larger sizes, as 12-bore guns, in nearly every case, cast very unsatisfactory and irregular patterns with these larger sizes of shot.

There are times when a cock Caper fairly astonishes the shooter by the shock that he can withstand. It is no uncommon sight to see one shot at in front drop apparently stone dead to within a couple of feet of the ground, then suddenly recover, and once more inflate his wings and pass away in the woods behind, leaving the astonished gunner in wonder and causing him to forget that he ever possessed such a thing as a second barrel until too late.

At times your shots may be so easy that they are like so many Turkeys, and probably the next drive you will not grass a bird and will feel tolerably small—you can scarcely believe these to be the lumbering old fellows that flopped out past you twenty minutes ago. At Murthly I once saw a really good driving shot fire a number of times without bagging one; four of the birds were undoubtedly very hard hit—behind, of course—and must eventually have fallen, though not within sight, two of the birds, both old cocks, coming almost to the ground in front of him, he allowing them to get at least fifty yards away in both cases before giving them the other barrel, which only seemed to hasten their retreat. After the drive I heard him bewailing the smallness of his shot and the extraordinary vitality displayed by the birds. Now I often meet him shooting, and a real good sportsman and a first-rate shot he is, but he never speaks of the Caper save in tones of the deepest respect, or acknowledges that No. 5 shot is any too small for him.

The Comte de Paris seems to be the first sportsman to wish to introduce into this country the art of stalking the Caper-cock in spring, when trilling his love-song; but the sport is not,

and probably never will be, general, owing to the scarcity of birds. This manner of slaying him is most fascinating, requiring the greatest care and quickness in approaching the bird whilst engaged in his song. It is only during the last few bars that the stalkers have time to make an advance of two or three quick steps forward, for it is at this moment that the bird seems to be thrown into an ecstasy of delight at the sound of his own voice and to become quite oblivious to his surroundings. But woe to the clumsy Nimrod who takes just one step too many and is discovered in the open, or treads on some rotten stick that crackles at his touch, he will have to go home both unhappy and Caperless for that morning at least. At this season of the year the male bird becomes most extraordinarily vigilant and his sense of hearing very sharp; the breaking of a twig at a distance will at once put him on his guard, and also put an end to his amorous ditty, his ears being ever intent for the sounds either of danger or the approach of his hated rival.

A friend of mine, Mr. Arthur Eden, a very keen sportsman and admirable shot, followed this sport annually in spring for a number of years during his residence in Russia. He describes it as being most intensely exciting, and requiring quite as much knowledge and observation as deer-stalking. The cock Capers, he says, in some districts, where they are in the habit of being stalked and shot at regularly, display an extraordinary amount of vigilance and cunning, particularly in adopting the following dodge. The stalkers are able to advance only during the time the bird is completing the last few bars of his song, and at this moment, after taking two or three steps forward, they are generally well in the open, and would at once be observed by the quarry if he were to suddenly cease his music. This is just what a natural instinct has taught him to do, warning him that this is the real moment of danger, and having been previously stalked he has thus acquired an intuitive caution that almost amounts to a reasoning power. Thus it often happens that the unfortunate sportsman is discovered when in the act of making his run forward, and the would-be victim lives to be stalked another day*.

At the latter end of April the hens draw in towards their breeding-grounds, and may be seen sitting in little parties together on the larch trees, of the shoots of which they are especially fond at this season of the year. Here, too, in chosen spots, generally some open piece of rising ground in a grass park near their haunts, come the cocks to settle their little differences of opinion with regard to their respective claims to the hands of the fair ladies. Many and fierce are the battles engaged in during the early spring mornings on behalf of their prospective spouses; and he who would wish to witness the picture of fury and rage let loose has but to rouse himself in the "wee sma' hours" from his comfortable bed and hie him to the battle-ground in time to see the morning sun breaking on a new day. He may not always be fortunate, but if he goes to a well-known fighting-ground, where birds are numerous, he will not be disappointed or sorry that he came. The onlooker having secreted himself carefully behind some big root or stone wall, an old cock will soon make his appearance, if not already on the ground when he arrives, and will proceed to strut about, showing himself off to his own evident delight—at one time elevating his red wattles and expanding the long feathers on his neck till they stand up like bristles on a hog's back, whilst he utters his hoarse croaking call to attract the attention of the hens; at another making little short dignified runs forward with his chest held like an old soldier, and his tail spread and drawn in close round his thighs, emitting the same curious loud hissing sound as when caught by the hand. He is in all his glory and feels the proudest

* I have never found much difficulty in approaching the cock Capersillie in Scotland in the spring. If ordinary care be taken, the sportsman or observer, as the case may be, can generally approach to within fifty yards of the bird when engaged in his love-song.



THE HOME OF THE CAPERCAILLIE

creature in the universe till another cock arrives; then, as two such natures cannot long remain in harmony together without some sort of understanding as to whose claim is the better, they very properly try and solve the problem of the survival of the fittest by promptly going for each other with a will. Then a fight ensues, commencing with a sort of preliminary skirmish like gamecocks; but as they warm up to their work their mode of attack becomes more blind, and consequently less scientific, catching hold of each other's neck, and ripping out whole mouthfuls of blood and feathers, till they are perfectly exhausted. By this time another cock will perhaps have arrived on the scene, and will keep "cave" in case of danger, and look on at the fight with a calm and unbiassed eye, not having the slightest intention of calling "time," as he knows quite well that the more his friends in arms get "pumped," the easier time will he have of it himself when it comes to his own turn; and so the fight goes on, always one bird not engaged being on the look-out, whilst the new-comers in the ring in turn test their strength and activity with the last victor, till the contest ends in a general "mêlée" and free fight all round, one fighting with the other promiscuously, and they become so weak and blind that they pay no attention to the warning call of the sentry should there still be one keeping watch. The spectator can then walk up to them within a yard or two, when they will make off with a considerable amount of unsteadiness in proportion to the nature of wounds received. Numbers annually kill each other in this manner, fighting till their heads are torn to such an extent as to be almost unrecognizable. McIntosh, the Duchess of Athole's keeper at Dunkeld, tells me he picks up two or three cocks every spring that have been killed in these fights; and James Keay, our keeper at Murthly, told me that on one occasion, when going his rounds through the woods, he came upon two old cocks who had so successfully mauled each other as to be lying on the ground in a perfectly helpless state, facing each other.

About the end of April the hens again seek their former breeding-places, and large numbers of them leave their winter-haunts in the hills for the low grounds, there to look out for suitable spots for nesting, not returning to the rocks and precipices till late the following autumn, in many cases not at all, being so easily killed in the early part of the shooting-season. Having selected a favourable spot under a spruce-fir or withered stump*, she proceeds to scrape out a fair-sized hollow, and lines it with a few leaves and feathers to suit her taste, and therein deposits, at the end of May, from six to thirteen eggs. When incubation commences, she sits very closely, even allowing herself to be stroked by the hand without betraying any uneasiness beyond a shake of her head and a hiss of disapprobation. In course of time the chicks make their appearance, and very seedy-looking little chaps they are, requiring on the part of their mother the utmost care and attention during the first few perilous days of existence, which are so fatal to the large majority of them. No young Game Birds, except perhaps Blackgame, and even these are as a rule stronger, are so difficult to rear, and though the hen Capercaillie hatches out the whole of her brood, it is quite the exception ever to see more than three or four youngsters with her after the first week: not that she is a bad or careless mother like the Pheasant, being, on the contrary, most attentive and careful with them; but the young ones have so many difficulties to overcome, such as deep heather and spring showers, that their delicate little constitutions seem unable to surmount them; with the exception of one or two of the strongest, most of them are soon killed by the damp or are lost in the deep bracken. Those,

* The sketch entitled "The Home of the Capercaillie" was taken from the woods near Murthly Castle. Beneath the decayed root shown in the centre of the picture there was, in 1888, a Caper's nest with twelve eggs.

however, that are fortunate enough to attain any size, seldom succumb afterwards, unless the season should be a particularly wet one, for they grow at an astonishing rate, gaining strength rapidly.

On disturbing a hen with young, she rises with a great flutter, and flaps off, endeavouring to attract attention by the usual broken-legged feints whilst her brood are making themselves scarce. If she does not succeed she will sometimes come right up to within a few feet, uttering



PALE VARIETY OF CAPERCAILLIE.

(Killed at Ballathie, Perthshire, by Col. Richardson, Dec. 1889.)

her stereotyped "coq coq," accompanied by little rushes to the right and left; and if the intruder should still remain, she resorts to other stratagems, by flying away with apparent unconcern, and then suddenly reappearing from another direction with her silent ghost-like flight.

Whilst the young are still in a half-fledged condition, the mother keeps her brood amongst the deep heather and bracken, where they can generally find a good supply of small insects, ants' eggs, worms, &c., which she scrapes up for them. This diet is not changed much till the



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HYBRID ♂ CAPECAILLIE AND PHEASANT

Shot at Arden, Lock, Lomond N.B. Dec. 1890

Litho. W. Greer-Bailey & Co. London E.C.

middle of August, when the wild-fruit season commences. Then, during the evenings, they are to be found in the raspberry and blueberry beds, taking but little notice of anyone who may perchance disturb them at their meal, beyond lifting their long necks and marching gravely out of the path. In September the cornfields offer their attractions, and every evening the family party adjourn thither, showing their true Highland spirit by displaying a marked predilection for oats above all other kinds of grain! It is generally at this season that your friend has his holiday and is eager to shoot a Caper wherewith to adorn his hall; but the bird at this season is far from being a thing of beauty, so many a man, who has a more subtle mind for the fitness of things, has preferred that his small uncouth specimen should be accompanied to the bird-stuffer by a little note stating that the enclosed bird must be replaced by an old cock in good plumage when the season is more advanced! Thus he ensures for himself a trophy he may well be proud of, and can show to his friends without a blush. A taxidermist told me that he mounted thirty or forty old cocks every year to be sent south to sportsmen as having been "shot" by them!

A most curious and extraordinary nesting-place of the Capercaillie was discovered in 1889 by the keeper at Rohallion, Perthshire. The nest was placed on the topmost branches of a Scotch fir, about 40 feet from the ground, and in this perilous situation the hen hatched her eggs, though how many survived the descent it is hard to say. Had they been like young Waterhens or Wild Duck, birds which occasionally build in situations like the above, they would probably have all got down in safety and little the worse for their rough descent. Not one, however, was picked up on the spot, for Boath (the keeper) told me he had searched about in the vicinity of the nest at the foot of the tree and could find no trace of them, and it was not till a fortnight after the brood were supposed to have tumbled down from their lofty home that he saw a single young bird with a broken leg accompanied by the old hen. This, he thought, was the sole survivor, as vermin of some sort most likely carried off the others that were killed by the fall. This is the only instance known to me of a game bird nesting otherwise than on "terra firma" *.

The plumage of the Capercaillie varies but little. They have but the two changes, one in spring and the other in autumn, the latter being slowly assumed, as in the case of the Grouse. The dress of the young male in first plumage is interesting (see figure, p. 18). This is cast about the beginning of September and completed by the end of that month; so that when October arrives he cannot be distinguished from the old cock except by his great disparity in size and the narrowness of the white band on the tail. During the second year this band becomes broader and more definite and the bird puts on about 2 lb. in weight; and in the course of the third year there is still an increase in the size of the tail, and the bird generally adds from 2 to 4 lb. more to his weight. A young cock of the first year will weigh from 4 to 7 lb., and third year and after from 10 to 13 lb. I have heard of 14-lb. birds, but have never seen one. No doubt the Russian and Scandinavian birds sometimes scale a little heavier than ours.

Amongst Capercaillie, as, in fact, amongst most birds, two kinds of plumage occur, namely, a light and a dark; but the Scotch cock Capers are almost invariably dark. This is of course owing to climatic influences, and the warmth of our climate in winter is sufficient to account for the lack of the rich white colour so noticeable in Continental specimens. The hens, however, have the two kinds of plumage very pronounced, both the dark and the light colours being strongly

* Since writing the above, I have been informed of two instances in which hen Pheasants have nested in similar situations.

developed—the dark plumage occurring most frequently amongst young birds, and the white amongst old ones, the latter being frequently white from the crop downwards besides having the beautiful white spots on the upper wing-coverts.

The Capercaillie is a bird in which albinism, or any variety, is extremely rare; and after a careful search amongst the best British collections, I have not been able to discover a British-killed variety. In the year 1889, however, through the kindness of Col. Richardson of Ballathie, Perthshire, I became the fortunate possessor of the beautiful variety figured on p. 16. This is, I



YOUNG MALE CAPER IN FIRST PLUMAGE.

believe, the only known British variety, and its extreme rarity may be judged from the fact that, out of thousands and thousands of Caper that are annually received from Norway, Sweden, Russia, and Germany, as yet no other albino, or variety, has appeared in the London markets, although numbers of naturalists and the game-dealers themselves are constantly on the look-out for such varieties*.

Instances occasionally occur amongst birds of the female assuming the plumage of the male, but with this species it is somewhat rare, and most of those which I have examined have been in the first stage of change; and whether in course of time they would have completely assumed the dress of the male, in proportion to the destruction of the ovaries, is hard to judge, as the subject has not been fairly worked out. Having dissected a large number of hen Pheasants in various stages of this change, I have found that the assumption of the male plumage seems to vary in proportion to the state of the ovaries—although not invariably so, for sometimes the bird had nearly complete male plumage when the ovaries appeared quite healthy; but I have not the scientific knowledge to enable me to discover abnormalities which are not apparent to the ordinary observer. I may have overlooked some vital points, and the bird might have been suffering from some other frightful

* There are beautiful varieties of the Capercaillie in the Lund, Bergen, St. Petersburg, and Christiania Museums, and the best foreign examples in this country are in the museum of the Hon. W. Rothschild at Tring. The late Mr. J. Marshall, of Taunton, also had a very handsome cream-coloured variety, which he obtained from Russia.



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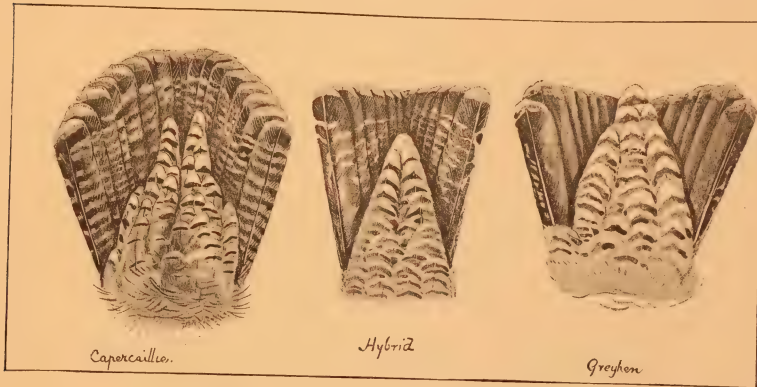
HYBRID CAPERCAILLIE AND BLACKGAME ♂ AND ♀

Litho W. Greve, Berlin S.W. London E.C.

malady, worse than gunshot wounds or the little white abscesses which are noticeable in the ovaries of those commonly known as "mule" birds.

The two birds depicted in the Plate are from my own collection; the upper figure shows a specimen with the plumage of the male just commencing, which was killed Nov. 1885 within a few miles of Perth. The other bird has almost completely changed, with the exception of one or two red feathers in the breast, and where in the cock the shield on the breast and crop is usually metallic green, in this specimen it is of a deep purple; it would be difficult at first to distinguish it from a young cock, were it not for the absence of wattles and its diminutive size, which is smaller than the ordinary hen. This bird was also shot near Perth, Dec. 1883. Col. Colquhoun has one nearly as dark, and I have another with still a little more brown and russet intermixed.

The only other species with which this interbreeds is Blackgame—the hybrids being the product of the Blackcock and Caper hen. Every year one or two are killed in the districts



TAILS OF CAPERCAILLIE, GREYHEN, AND HYBRID BETWEEN THE TWO.

inhabited by the Caper in Scotland. Though I have repeatedly tried to secure a specimen of the female of this cross, I have never yet been successful, and now begin to feel some doubt as to obtaining an example to figure*. All the birds that have been shown or sent to me as veritable specimens have turned out to be Greyhens commencing to assume the male plumage, or hen Capers doing the same. McGregor, the keeper of Ochertyre, Perthshire, who is a most accurate observer, stated that three, all hens, had been shot on that estate ten years ago, and he described the birds very accurately, so that I have no doubt they were female examples of this hybrid. These were preserved, but he had no recollection as to what had become of them. The chances are, then, that the reader is not likely to see any but males. The specimen of the male from which the drawing is taken is a very handsome one, showing as it does the characteristics of both species well, for, as a rule, the plumage is somewhat sombre and dull; and with the exception of this one, which shows the Caper well in the back and wings, and two that Gen. McIntyre, of Fort Rose, has, which are as black as

* Since writing the above Mr. Walter Rothschild has been kind enough to lend me an undoubted specimen, which is figured in the coloured Plate of this hybrid.

Blackcock, the males may pass as somewhat uninteresting birds, possessing the respective beauties of neither species. These hybrids manifest a peculiarity which is not noticeable to any extent in either Capercaillie or Blackgame, namely, that of a roving disposition. At times, a single bird will suddenly appear in places where Capercaillie are quite unknown*, thus showing that it must have wandered far from the place where it was born. In the year 1889 one was shot at Lochloy, near Nairn, by Ronald Baillie, Esq., and others have been killed at various times in Aberdeenshire. At the first reintroduction of Capercaillie, two cocks were kept penned up with domestic fowls, and in one instance the hen's eggs were hatched and successfully reared, but no specimen of this curious cross was ever preserved.

Since writing the foregoing notes I have been kindly informed by J. A. Harvie Brown, Esq., of the existence of a hybrid between the present species and a Pheasant which had occurred at Arden, Loch Lomond. This remarkable cross was very courteously sent to me by Mr. Lumsden, who shot the bird on his estate on that beautiful lake. It cannot certainly be called a handsome bird, for the size of the feet give it an ungainly appearance. It bears a strong resemblance to the Blackgame and Pheasant hybrid, but is on a large and clumsy scale.

* This, again, might be accounted for by the presence of a roving hen Caper that had come to the ground in the spring, where she had paired with a Blackcock. It is noticeable in the case of the hen Capercaillie that when she wanders from her native ground to other districts not frequented by her species, she will as likely pair with a Blackcock as not. *Vide*, for instance, Capercaillie and Pheasants.



A FALLING CAPER.



Black swan, Pheasant, & Ducks.

BLACKGAME.



THERE is no doubt, although every care and precaution is taken by those who have it in their power to ensure the protection and increase of this noble bird, that in almost all parts of England and Scotland it is gradually on the decrease. In a very few places, where they were formerly comparatively scarce, they now exist in considerable numbers, but these spots are few and far between; and the fact of the state of the ground having become in the course of time suitable to their habits is sufficient reason for the partiality, sudden or gradual, for these localities. Many causes are assigned as reasons for this gradual extinction, and certainly not the least potent is that of the destruction of the hens, which are at all times less wary than the males. They are easily shot, while the cocks, which ought properly to number only one fourth of the stock of birds, as a rule, far exceed the hens in point of numbers. I can well remember when I first went regularly to shoot at annual Blackgame drives on Rohallion, that, in the course of two short beats of about a mile each, we generally used to kill from fifteen to twenty brace of these birds. Since that time

(about twelve years ago) I have noticed with sorrow the annual change for the worse, in the state of the bag after shooting these two drives, until in the year 1889 but two Blackcocks fell to the guns, whilst only about twenty were seen altogether. On this moor every care has been taken of the birds, and for its size it is one of the best Grouse-grounds in Perthshire, yet the Blackgame, from amongst which but very few hens are killed, have gradually diminished, till I am afraid it will in time be considered quite a "*rara avis*." This little moor is only a case in point, for the same may be said of about three quarters of the Blackgame-ground in Scotland.

By watching these birds during the breeding-season I have also noticed—comparing the species with other game birds—how very large a proportion of the hens are barren. One would imagine from this that the period of fertility of the Greyhen is much shorter than that of the other kinds, in fact only lasting two or three years; and should indiscriminate shooting be carried on, it leaves but a small percentage of breeding birds to carry on the stock.

Change in the condition of the ground they have been accustomed to inhabit materially affects them, and the necessary food and kind of shelter they require often change through the advance of time. For Blackgame like best young plantations skirting moors and cultivated lands; when, therefore, these develop into big, silent woods, as in course of time they will, if left alone, the birds move off to seek for "pastures new," leaving their old haunts to the Owl and Woodcock, and the old sportsman may then wander all day through the deep heather and lofty pines without seeing a single bird, where he formerly used to kill his ten or fifteen brace any day in the autumn. Of late years, too, the springs have not been all that could be desired. Heavy snow and hail showers have occurred often in Scotland in the beginning of June and caused great damage. One heavy storm at this time, when the chicks are just taking their first peep of the world, is quite sufficient to exterminate such delicate little creatures as they are. They are also subject to numerous other dangers, and being hatched generally on rough and swampy ground, they frequently end their short existence by tumbling into peat-holes and drains from which they are unable to extricate themselves. However, sportsmen must hope for the best, for many a one would be sorry to miss from the mixed bag the addition of the Blackcock, certainly one of the handsomest birds of the chase we at present possess.

The best districts in Scotland for Blackgame are Dumfriesshire, Roxburgh, and parts of Perthshire, Inverness, and Aberdeenshire; and in England, Westmoreland, Cumberland, and Northumberland—though they are found here and there in almost every county in both England and Scotland, having been shot in every county from Caithness to Cornwall. I once saw near Aldershot a Blackcock and a handsome cab within sight at the same time, and remember being rather amused at the occurrence, as one naturally associates the former with blue mountains and silvery birch-woods, and the emblem of all that is wild and free, whilst the latter goes with Piccadilly and modern civilization. Formerly, and up to a recent date, good bags were made on Exmoor and the neighbouring hills in Somersetshire. In that county a friend of mine with another gun on Sept. 1st, 1884, killed twenty-seven brace; but since that time there has been a marked change for the worse in point of numbers. The New Forest, Woolmer Forest, and parts of Staffordshire and Dartmoor used also to be good, but there are only a few stragglers now left. Like the Capercaillie, Blackgame show no permanent attachment to places where they have been introduced, and will not stay any length of time in some districts even where conditions are favourable to their habits in every respect. Introduction has been tried without success in a number of places, most noticeably in Norfolk and Ireland; but it has always resulted in failure, the birds staying till the following spring, sometimes a little longer, and eventually disappearing entirely.



"A GLEN IN WINTER."

The ground Blackgame like best is a rough and broken country bordering cultivated and arable land, where birch and fir woods fringe the wild moorlands, where they find good cover amongst the deep heather and rushy margins of the mountain burns, and every kind of insect and vegetable food is easily to be had within reach. This is the chief attraction to a gourmet like the Blackcock, who is wont to change his diet every three months, stuffing his crop every morning and evening as tight as a drum with whatever delicacies the different seasons afford in the shape of fruits, heather, grain, or insects. When their natural homes cannot supply these latter necessities, their instinct is called into play, and they will wander far to obtain them. I have often shot birds out of turnips and potato-patches in October, that must have travelled many miles to gratify their palates: the crop of a Greyhen which I opened contained raspberries, blaberries, ants, heather, grass, and oats, and the bird, after having half filled her crop with the grain, had evidently completed her dinner with a course of meat and dessert.

During the winter months Blackgame do not feed on the shoots of the Scotch fir to the extent that Capercaillie do; in fact, I think they seldom eat them at all except in very severe weather, when the whole of their food is found on the trees. They generally prefer the buds of the birch to anything else, and if surprised during their hours of repast, which are generally in the early morning and late afternoon, they do not manifest that extraordinary degree of shyness which is inherent in that species.

That they do not feed on the pine and larch tops to the extent that Russian or Norwegian birds do can be easily imagined, for Blackgame will not eat these unless driven to do so through hunger. In our comparatively mild winter the birds have seldom to rough it for any long period, whereas the foreigners generally have to endure months and months of privation. This particular food has the effect of making the flesh of the latter exceedingly rank and turpentine, whereas it is seldom that one gets a Scotch or English bird that can honestly be called at all disagreeable in this respect—there is generally just enough of the gamy flavour to make it agreeable.

In this country Blackgame do not migrate, as they do in some districts in Sweden and Russia; indeed even the large flights of the birds seen in those countries can hardly be called migrations, they are only making their annual change in search of the food they like best, and do not always travel to the same spots, their goings and comings being regulated by the abundance or otherwise of the birch-bud or fir-crop in the various districts to which they journey. Here, one but occasionally sees single birds or small parties travelling high in the air from one range of hills to another, during the spring or autumn: these are individuals in quest of new feeding-grounds, or are merely being moved by the usual spirit of restlessness that overtakes most birds at those seasons; they generally return again to their old haunts after a short absence.

When the icy blasts of winter show signs of abatement, and the first warm rays of the March sun have taken the sharp edge off their keenness, the bellicose disposition of the Blackcock, that has so long been dormant, is once more aroused into life and activity by their quickening influence, till, by the beginning of April, the martial fires can be subdued no longer and find a natural outlet in open warfare, when each and every one endeavours to prove his superiority and his proper right to the affection of the fair sex by the strength of his bill.

As with the Capercaillie, they select a regular spot where all who would enter for the tournament must come to prove their valour. These places are called "Playing-grounds," and are usually situated on some grassy flat at the edge of a moor or wood where the birds have roosted.

mound and stick to it) both birds simultaneously lower their heads and arch their tails, at the same time extending the primary wing-feathers and trailing them along the ground. The tails are not spread in the form in which they are generally depicted in books, *i. e.* upwards, except for a second, when actually in the process of raising them for expansion, but are spread out more in the shape of a fan, with a concave surface, the beautiful curled feathers almost touching the ground. This I have endeavoured to show to the best of my ability in the sketch of the Playing-ground. The positions of all these birds were drawn on the spot, by watching them through a strong glass at about forty yards, and I did not complete any figure till thoroughly satisfied it was correct.

Sometimes two birds "set" to one another as far as thirty yards apart; they then advance slowly till separated only by a few feet. Then the actual fighting, if there is to be any, begins.



ATTITUDES OF THE BLACKCOCKS ON THE APPROACH OF A GREYHEN.

It, however, often happens that, as with our own bombastic race, it is all "gas," and the two, after skirmishing up to one another with every apparent gesture of rage and fury, by the time close quarters are arrived at, have come to the conclusion that another occasion will do just as well as the present for fighting it out. So the matter is "squared." More often they stand and fence, after the manner of bantams, until one by superior tact and rapidity suddenly seizes his adversary by the "scruff" of the neck, and gives him a right good dusting, handling him in no gentle manner with his strong bill, whilst he beats him over the head with both his wings, the latter making a loud noise. When he who hath come off second best eventually gets clear, he has generally had about enough for the time being, and is either chased ignominiously off the ground to hide his diminished head in some quiet corner, or wings it off altogether to the nearest wood. This is only temporary, however, for he does not consider that he is altogether vanquished till he has made at least another



"EVENING AT THE LOCH SIDE."

attempt to display his prowess. The victor gives his plumage a shake, and calmly proceeds to select for himself a position of vantage in the shape of a grassy mound, the possession of which he is now prepared to contest with any opponent who may be bold enough to tackle him, and if the birds are at all numerous he is not long in having his wish gratified. He seats himself composedly on his little hillock (as indicated in the upper figures of the sketch), and again commences his song of war, at which some wandering knight, who yet has his laurels to win, soon takes offence and at once challenges him. Now, in preparation for this coming battle the victor of the former strife entirely alters his tactics, and his attitude is one purely of a defensive nature; for, after rising to his feet, he simply watches the advance of his adversary with lowered head, allowing the latter to waste his energies in futile attempts at getting above or behind his guard, till the process of fencing wearies him, when with one quick movement he repeats the lesson he gave his former antagonist.

A good fight is very interesting to watch, and sometimes lasts for a long time when the two are evenly matched; but this is rarely the case, and one or the other usually gets the best of it in the first round. I have never seen them engage in a general "mêlée" as Capercaille do when several cocks are fighting at the same time. With Blackcocks it all is perfectly fair, Queensberry rules being strictly adhered to*.

At intervals during each separate fight Blackcocks emit a most curious call; it is a hoarse screech, resembling the noise that is too painfully familiar to us, namely, that of cats at night on the house-tops, supplemented by the said animals being afflicted with sore throats. The sound is both wild and unmusical in the extreme.

We will suppose that the observer has come early on the scene, before the Greyhens have made their appearance. The approach of one of the latter is the signal for an immediate cessation of hostilities on all sides, and intense excitement prevails amongst the assembled Blackcocks. Her approach has been observed by a single bird, who has been sharper than the rest in detecting the lady afar off. If you are at the moment watching him, you will see him suddenly draw himself up to a rigid position of attention, till he is sure she is really coming. Having settled this in his mind to his own satisfaction, he throws himself into the air, and flutters up a few feet, uttering the while his hoarse note with all the power and effect he can muster. This is, of course, done to impress the lady in his favour, and arouse in her breast a proper sense of admiration which he considers his due. His example is immediately followed by all the others, who on alighting dance about in the most absurd manner, each one trying to see who can screech the loudest and be the most ridiculous in his antics.

The sight of the Blackcock is supposed to be very keen, and is undoubtedly so at all other times. But at the period of love and war we speak of his senses are often so dulled or excited, by one or the other, that he does not seem able to distinguish a Grouse passing by at a distance from a Greyhen, when the identity of the species can be noticed at a glance by a human being who is much further away from the object. Curiously enough, I never saw them cease their hostilities when a pair of Grouse flew by chasing each other, a single bird flying straight in their direction being always the chief cause of their excitement. On one occasion I saw them mistake a Partridge that came flying out from a wood close by for one of their own species.

* In the immediate foreground of the Blackcock tournament sketch will be noticed three birds in their most characteristic positions. The bird with lowered head and arched back is in position of defence, facing one advancing to the attack, whilst the third, anxious to fight also, dances round the combatants and though desirous of engaging the bird on the defensive, is yet too much of a gentleman to attack him whilst occupied with another.

When a hen has alighted on the Playing-ground the male that is nearest to her pairs with her and fights off any other that disputes his possession. The hen meanwhile walks sedately round her lord and master, picking about at the grass coquettishly and pretending to be feeding. Each hen on arrival causes the same general excitement, and is appropriated by one or other of the successful cocks, till the harems are filled up, one cock having at times as many as six or seven hens. As the season advances, after the first few mornings of the hens coming to the ground, they resort to the same spot each day, and stay with the same cock who has previously trodden them, and are not interfered with afterwards by other cocks, who acknowledge the superior claims of the male to whom they rightfully belong.

Blackcocks resort to their Playing-ground till the summer is well advanced, and one morning (June 4, 1890), when I got up at daybreak to stalk Roe at Eskadale, on opening the window to let in the fresh morning air, much to my delight there were my old friends the Blackcocks again, whirling and strutting about as usual in the grass-field. There were about ten brace of cocks and a solitary hen, and I watched an old cock showing himself off to the latter by running round and round her for fully half an hour, during which time he did not tread her or attempt to do so. She was undoubtedly an old barren bird, as, had she been fruitful, she would have had a nest claiming her attention at that time. The keeper with whom I was staying (Donald Ross, a most observant naturalist) tells me he has never noticed hens with the cocks so late as this before.

No sportsman unless he has himself witnessed it can have any idea of the speed in running that a Blackcock can attain if hard pressed and actually made to run, as the young cocks have to do when pursued by the old ones. Every now and again one will see these young bloods, who have arrived at a fancied estate of physical perfection, make their appearance amongst the ranks of the old birds. Their pride, however, soon has its fall, and when one of the proper masters of the ring approaches to attack, they suddenly find that their courage has somehow failed them, and that he who fights and runs away may perchance be more successful on some future occasion. Then commences a hurried and ignominious retreat, in which the young bird is pursued by one or more of the justly-incensed ones, and endeavours by the fleetness of his feet to extricate himself from a position which his own temerity has brought him into. This is not effected till he eventually takes flight and departs altogether. His running powers are really very considerable, and he goes for the time as fast as a Partridge, and no one who has seen the latter going down a hedgerow in his best form can assert that the pace is not good. As a rule one does not form a very high opinion of the Blackcock's rate of speed. Knock him over in the open with a broken wing, and you will see he seldom attempts to use his legs to any great extent unless given time: even then he does not hurry much, but covers his ground with the deliberation and coolness that characterize all his movements, not attempting perfect concealment till at some distance from the spot where he had been brought down, after which he certainly does hurry up a bit and travels in a fairly business-like manner.

In the spring evenings the Blackcocks again return to fight and make love to their hens as in the morning. But fewer birds come, as a rule, and there is not the same zest and go about the show as in the early morning, and the birds, like all moving creatures, are not so "beany" in the evening, when about to retire to roost, as at the beginning of the day*.

* I trust I shall not have wearied the reader's patience by the somewhat lengthened account of the proceedings at the Playing-grounds. Not having read a detailed account of them in any work, I have felt justified in writing at some length, as the chief object in this work is to put before the reader facts of interest that have not been threshed out elsewhere.



BLACKCOCKS FIGHTING ON A PLAYING GROUND.

(The attitudes in the above sketch are all carefully drawn from Nature).

By the middle of May the nest is formed of loose dry grass, and in it the Greyhen deposits her eight to ten eggs, the first broods being seen about the beginning of June. The young closely resemble those of the foregoing species in appearance and in point of delicacy, but the percentage of birds raised from the eggs is far greater. It is common to see seven or eight chicks with their mother, whereas a Capercaillie hen seldom raises to maturity more than two or three of her brood. Unfortunately, their extraordinary tameness costs many young Blackgame their lives. In districts where they are at all plentiful, the man who wishes to make a bag will have it all his own way, beginning with the mother and gradually working through the entire family. There can be no sport in picking up these unfortunates from beneath the dogs' noses, for a man has nothing to be proud of if he kills them all, and everything to be ashamed of should he miss any of them. Good sportsmen, therefore, will spare their Blackgame till a fitting season, when, in return for the temporary respite, the birds will have gained strength and beauty, and will give to the successful shooter a pleasant feeling of gratification that appeals to his sense of beauty and pride.

The second week in July robs the Blackcock of his tail, and with it seems to go his fiery nature. From the roaming knight, proud in gorgeous trappings, which he is ready to display and prove his right to, he now changes to a shiftless wanderer, skulking for the greater part of the day in the thick bracken or gorse covers that constitute his home at this season. Bereft of his splendour he seems ashamed of himself, and only ventures out of his retreat in the very early mornings and late evenings. He may then occasionally be seen sitting disconsolately on some hummock amongst the peat-hags, in company with one or two others, woe-begone like himself.

On these occasions, Blackcocks are shier than at any other time, and will move off to cover on the slightest sign of danger. But if the intruder is between them and the wood, they will pass right over his head, should he stand still. When once in their leafy homes, their demeanour becomes quite as lamb-like as that of their wives and families, and I have seen an old Blackcock fly right into the pointer's mouth, having become so confused that he did not know how to make his escape after sitting so tight!

When September has nearly ended, the Blackgame gather together and form their regular winter packs, which may be divided usually into—those composed of a mixture of old cocks and hens, or all old cocks, and those in which none but young birds of the year will be found. Sometimes during the winter packs are composed entirely of old Blackcocks, the hens during this period going about in small parties or more often singly. On a winter's evening, too, if you happen to be near a roosting-place, you will generally see the Greyhens coming to roost singly. Packs of Blackgame may consist of from half a dozen birds to the whole of the individuals of the species on the ground. Though some authors say that Blackgame do not pack, such is not the case. I have twice seen packs at Donne, in Perthshire, which the sportsmen present agreed must have numbered two or three hundred birds at least. When sitting on the stubbles one of these packs looked in the distance so like an immense flock of Rooks, that they were at first mistaken for them, but there was not the slightest doubt as to their identity when they rose. From the stubbles they made straight for the moor about a mile off, and there baffled all attempts to get them forward till late in the evening, when, following their usual tactics of keeping to one favourite pass, they came to the butt in which I was, in two big lots of about a hundred each, the rest having broken back. It was one of those occasions on which you seem literally lost in birds, and which makes you feel how utterly feeble one's single little "pop, pop" is amongst the

serried masses of creatures that for the moment surround you. At such times one suddenly wishes for fifty guns with fifty pairs of hands to work them to stem the torrent of the passing flood.

Old sportsmen in the Black Isle and East Cromarty will tell you that when they were boys it was not uncommon during the harvest-time to see the low grounds swarming with birds, flocks of four or five hundred being often seen. This is literally true, for sixty years ago that was about the best district in Scotland, though now it puzzles the shooting tenants there to get a few brace for the table. Cultivation and drainage, to a large extent, have worked their effects on the animals native to the district, and the Blackcock is the chief sufferer.

Till the end of October, Blackgame feed much on the arable land, returning at sunset to the rough and unbroken tracts, where they pass the night. Here, again, even should the sexes have been together during the previous day, they usually spend the night apart, the cocks sleeping in the rough gorse and scrub that fringe the borders of most moors, whilst the hens, after having resigned their broods to the tender mercies of the world, can be seen wending their way to some favourite spot regularly every evening at the same time. I have timed birds thus coming in to roost, and found they only varied a few minutes, and have no doubt they were the same birds each evening. These spots are generally broken peat-hags where the heather is long and rank.

Although *terra firma* is their natural sleeping-place, Blackgame sometimes roost in firs. These are generally single old cocks, or hens with broods. In the latter case it is probably done as an additional safeguard against the attacks of vermin. Greyhens are not demonstrative birds as a rule, but to see one seated on the high branch of a fir, glucking away all she knows until her entire family has joined her, is rather amusing. She very nearly gets excited, but not quite. The young do not take to the trees till they are two months old*.

Sometimes, when watching a pack of Blackcocks on the hillside in late autumn, you will see a pair of them dancing about and squaring up to each other for a minute or two as if some transient recollections of their spring battles were passing through their minds and were not quite forgotten. They only do this on those still warm October evenings that are so frequent in Scotland†.

Blackgame, though very difficult to rear in the earlier stages of their existence, make excellent and amusing pets; and one, a Blackcock, reared by a friend of mine, became so tame as to be quite a nuisance. It would follow him about the garden wherever he went, and ride on the top of his hat, if allowed to; neither did it betray the slightest fear of strangers, or of beasts of any sort. During the spring its habits resembled those of the wild birds, without the very necessary adjunct for fighting, namely, a foe; but this did not seem to distress it very much, as it would content itself with imaginary ones. A violent death is the usual end of interesting pets, and this poor creature's end was no exception to the rule. One summer evening, a strange gutter-bred mongrel, of an unsympathetic nature and loose principles, got into my friend's garden by chance, when of course the unsophisticated child of the forest went to make friends with the vagrant, as was his wont with all newcomers. But the cur either misconstrued his motives, or imagined he was too

* It is interesting to notice the hereditary instinct of this species in perching in trees. If a Greyhen with chicks, no larger than Thrushes, be flushed on the hillside and there are firs and spruces below, they invariably end their flight on the summits of the trees, the young birds maintaining their equilibrium at once, though never in a similar situation before.

† I see that Mr. Abel Chapman, in his charming book on 'Bird-life on the Borders,' calls this pseudo-crotism.



INSTANCE OF AN ADULT BLACKCOCK ASSUMING THE PLUMAGE OF THE GREYHEN.

(From the Collection of the Honble. W. Rothschild.)

good and pure a thing for this wicked world, and so promptly sent him on a journey to the next, where we hope his confidences were not misplaced.

Blackgame are very silent birds except in spring, and it is seldom one hears them utter any note whatever at other seasons of the year. Last year, during a drive for Blackgame, an old cock came sailing along the hill below, calling his whirling note as loudly as he could, as if he had lost himself, and was hunting for the others, not knowing where to go. This my respected parent, who was the gun over which he passed, succeeded in showing him to the subsequent advantage of the bag. This is the only time I ever heard one utter any loud call during the autumn or winter months. You hear the cocks on rising sometimes utter a quiet guttural note to one another, as much as to say "now its about high time we were off;" but that is all. The Greyhen gives a "gack, gack" now and then: I have never heard her make any other vocal efforts.

Hawks and other vermin do not affect Blackgame seriously after they are able to take care of themselves properly. Falcons may, perhaps, stoop and occasionally kill a few. Stoats and weasels are too busy looking after the hares and rabbits and mice, if there is a sufficient number of these

to supply their fastidious tastes; if not, Grouse are generally the victims, their flesh having a far greater attraction for birds and beasts of prey than that of their larger brethren. Scotch keepers will tell



AUTUMN.

you how fond the Peregrine is of striking Blackgame should they pass him when he is out on one of his marauding expeditions. He will not go a yard out of his way to strike at them, but woe to the unlucky one that does cross his path: he would stand a much better chance of saving his life in the hottest of hot corners than when that living thunderbolt drops from the clouds. I have two or three times seen a Peregrine strike Grouse, but never Blackgame; but I once saw a little Merlin dash at a Blackcock and send him sprawling into some birches below. Now was a good chance of seeing some fun, I thought, for I was wondering how the little fellow would hold him down to the ground once having got him there, so I accordingly started towards

them at full speed; but before I had gone three steps forward, up into the air again shot the little demon of mischief, and hovered around screaming in his delight at his own fun. Having no dog with me—I was returning from fishing—I searched for a long time in the bushes, hoping to catch the Blackcock and see how he had been struck. He must have crawled away under some root, as I could not find him. The presence of a Hawk has an almost paralyzing effect on any of the Grouse kind, and if they have been, as this bird was, driven into thick scrub, they will sooner submit to be picked up by hand than trust themselves on the wing again.

So long as a sufficiency of food is obtainable, a change of ground to these birds is not necessary. In foreign countries, small and partial migrations, if they may be so called, occur where the winters are so severe as to bury their feeding-grounds too deeply beneath the frozen snow. Long-continued feeding on fir-tops and birch-tops becomes too insipid for palates that are ever in search of variety, and they forsake their accustomed haunts in big packs, chiefly composed of cocks, and journey to a distance where a change of diet can be obtained. They are amongst the hardiest birds that exist, and often are found during winter as far north as 68°, if not further, in company with the Siberian Jay and the Hooded Crow. In this country the birds now and again change their ground for short periods, but do not migrate.

The flight of Blackgame is both easy and rapid, being less heavy than that of the Capercaillie, though at a distance Greyhens are easily mistaken for the hens of that species. There is a certain ease and grace about the beats of the wing, followed by the long sail through the air, that gives dignity to their appearance when flying in company with Grouse or Pheasants. It is so collected and cool beside the hurried and noisy flight of other kinds, and seems to be performed without any apparent effort, which adds greatly to its buoyancy. On the other hand, before the Blackcock has attained the elevation necessary for his proper flight, when rising from a flat surface or out of a hollow, his efforts to rise are accompanied by a display of clumsiness and noise that even his inferiors in flight would be ashamed of creating. But he has often the satisfaction of knowing that his life has been saved by the demoralizing effect which he has caused in the heart of the young shooter fresh “frae the toon,” to whose flurried senses he will have appeared in the guise of the catharine-wheel cock pheasant that so terrified poor Mr. Briggs, of ‘Punch’ fame.

When once fairly started, unless the cause of alarm is very near, he will swing round with head to wind at once, or at any angle across it that occurs to him; but he will seldom proceed to any distance down the wind, owing to the discomfort of having his curly tail blown about, to which he apparently has the very greatest objection. If scared by coming suddenly on the boxes, should a strong wind be blowing in their faces, I have often seen them retreat for a short distance down wind after being shot at, and then, having made up their minds that their fears were not half so bad as the attendant discomforts of an ignominious retreat, come on again recklessly, even though they have seen their companions fall at their first attempt to run the gauntlet.

Blackgame can fly a greater distance than any of the other species, and instances have been known on the Continent, where a local migration has taken place, of their travelling immense distances in a single night, though it was not known whether they rested on the way; but in all probability they did not do so, as, when travelling from point to point, they generally ascend to a great height in the air, after the manner of all birds migrating, and proceed direct to their destination without any intermediate halts, often being so exhausted on arriving as to be easily captured by hand. In this country their journeys are never very protracted, the longest journeys they ever take being merely short passages from one range of



BLACKGAME (TETRAO TETRIX)

Here assuming the plumage of the male from specimens killed in Pershire, N.B.

hills to another, or trips to the low grounds in search of food. I have on two occasions seen single birds flying across the valley of the Tone in Somersetshire, from Blagdon Hills to the opposite range, called, I think, the Quantocks, a distance of about fourteen miles, and there is no doubt they often cross this valley from Dulverton and Exmoor, as a rabbit-catcher on Blagdon told me he had seen them arriving from that direction.

The usual height at which Blackgame travel in the air is from twenty to thirty feet, varied in accordance with the strength of the wind. If this be strong, they must naturally be content to lower their flight, gaining whatever shelter they can from the various rises and depressions in the ground by skimming close over it. If Grouse, too, should be flushed with or beneath them, when they are moving, they often "stoop" to travel in company with them. The pace at which Blackgame move is very deceitful; for just watch for a moment that old fellow sailing easily and calmly along the side of the hill with that covey of Grouse, which seem to be doing their very best to keep on even terms with him, and you can well understand where the contents of those last two cartridges of yours went to. They certainly were not in front. You still keep your eye on him, and will be again deceived if you think he is going to settle within sight, for though he seems to be putting on the brakes hard the whole time, yet he still moves on and on till the shoulder of the hill hides him from view.

They often resort to the peculiar "header" alluded to in the article on Capercaillie, and a whole pack will do so at the end of a day's shooting if they have been frequently driven and hustled about. By that time they are well on the *qui vive* and quick to take alarm, being ready to sheer off at a moment's notice from any spot that may contain their dreaded enemy.

To men accustomed to driving, and in the habit of seeing both the species together on the moors, Blackgame are not difficult to distinguish from Grouse on the wing when advancing to the guns, except in the late evening. Then a good sportsman must be forgiven if he innocently slay a Greyhen, for they are decidedly difficult to tell when coming straight and low over the heather. If their wings are not in motion, apart from the size, the only difference one can notice between the two species is that Blackgame, when near the ground, carry the head a little higher in the air. What really is most difficult to every shooter is to distinguish quickly the Blackcocks from the Greyhens, where it is a case of "ware hen," so as to enable him to select his bird when it is well in front of his butt. If the light is even, or the sun is behind the shooter, he is right enough for his single or double shot, as the case may be; for the plumage of the two sexes is then quite easily distinguished up to seventy or eighty yards, even when the birds are coming straight on. But should the light be failing, or the day be misty and dull (which, by the way, are the best days on which to shoot, the birds nearly always travelling low and straight ahead when driven), then the sight of the man who can spot his birds at even forty or fifty yards is indeed phenomenal and much to be envied. For myself, and I think the majority of sportsmen will be of the same mind, I like to have the least bit of his tail focussed on the retina of one eye before I pull. By the time this has been accomplished you find you have only just managed to get your right off without trespassing on the dangerous angle, so are obliged to take your left well behind. In shooting Blackgame it is of the greatest importance that, with Blackcocks at any rate, one should take the birds in front if possible. When the light is not very good, this becomes difficult and requires very quick shooting, which of course gives an additional charm to the sport. Blackgame, in nine cases out of ten, are really very much easier to shoot than Grouse, provided they are taken at the right time and in the right way. When hit well forward they drop cleanly

enough, but when fired at going away they will often carry off a charge that would drop a Grouse at once.

When fully feathered and in possession of all their faculties, there are no game birds better able to take care of themselves than this species. When shooting in line, after the middle of September, it is only now and again that one gets a chance at them by suddenly surprising a single bird that has been resting in some corner behind the rocks or bushes, and has not noticed the approach of the guns. If there are old birds about, they will have already got into little parties of their own, and taken up their post of observation in some exposed situation, from which they can have a good view of the surrounding country in every direction, and thus ensure nearly perfect safety for themselves. They consequently often do not get shot when driving commences; only the less fortunate youngsters, which have not yet learnt to take complete precautions, have to sacrifice their lives. Occasionally an old Blackcock is surprised in deep heather or bushes; but if he is, he generally has the cunning to sit closer than a young bird, and therefore has a better chance of being passed over altogether. By that season in but few places dogs would be used, and he is either walked right on to, or discloses his presence by breaking cover behind, when the line has passed, and he fondly imagines he is well out of shot. It is these stray birds, with the ever-varying kind of shot that they present, that afford the chief pleasure of shooting to votaries of the gun; and as every fresh variety offers an additional charm to the Highland sportsman, how much should we feel indebted to the Blackcock, who is ever the most noticeable and beautiful item in a mixed bag! As the shooter swings along over the heather, he likes to feel that he is able to bring to bag whatever is likely to spring up in the shape of fur or feather, from the bounding Roe to the dodgy Snipe, and nine men out of ten prefer making a small and pretty bag of eight or nine varieties to a large one of Grouse or Partridges. The sportsman knows that in helping to obtain the former he is learning something new in every shot that he fires, having to make a different calculation for the pace of each species, and knowing that by practice at this kind of sport he will greatly improve his shooting; whereas in the latter case a man is just a little apt to get careless in his shooting by undertaking the killing of a large number of birds of the same sort in succession, though in reality an equal amount of skill is necessary. Besides, no sportsman cares to know for certain what he is to fire at next: he much prefers to use his own powers of observation in recognizing at once, when shooting on new ground, the spots that are likely to hold the different kinds of game, and feels that his knowledge of natural history is of some use to him when he grasses his Snipe neatly before it has gone half a dozen yards from the bit of wet ground in front; while Mr. Jones, on his right, has been either asleep or has just stopped at that unfortunate moment to adjust his bootlace or have a "wee dram." Though probably quite as good a shot, Mr. Jones evidently had not been using his eyes before he selected to halt, and therefore has probably lost his one chance of a Snipe for the day.

Perhaps nowhere in the United Kingdom can prettier mixed bags be made than at Murthly, one of the most beautiful estates in the Highlands, about fifteen miles north of Perth. This delightful shooting my father has rented for the last thirteen years from Sir Douglas Stewart, and on this ground we can get a very fair day's sport from the 1st of August to the last day of the season. Its chief attraction lies in a most delightful little bit of moor of about 400 acres known as "the Bog," which may be familiar to many of my readers in "Murthly Moss," a landscape by my father, exhibited in the Royal Academy, 1888. On this little bit of moor and marsh and wood one can go out any day in October and kill everything in the game-list with the exception



HYBRID BLACKGAME AND PHEASANT.
Drawn from the specimen in Glen App Galloway, Ayrshire

of Ptarmigan and Red and Fallow Deer*. A more thoroughly sporting spot for its extent it would be difficult to imagine. The illustration at the head of this Chapter is a photograph, by my brother, of the different kinds of game killed on the Bog. The examples are taken from a bag of eighty head killed on October 7, 1889, by three guns. It includes Partridges, Pheasants, Hares, Rabbits, Roe, Woodcock, Capercaillie, Snipe, Teal, Wild Duck, Pochard Duck, Grouse, Blackgame, and Wood-Pigeons. (Shoveller, Wigeon, Tufted Duck, and Golden Plover were also seen when rising with the first flush of the Duck.) Every year Fallow Deer come on the ground, but seldom stay after the middle of August, and consequently are seldom shot. In 1885 a stag made his way into the cover near Birnam Hall, and though I hunted for him for two days, he could not be found or seen by any of the keepers or myself, but was passed by my sister within a few yards when feeding quietly near the house.

In 1885 and 1886 I spent the early winter at Murthly, and enjoyed some delightful days in the autumn, wandering by myself over my favourite haunts. There were no other sportsmen staying at the house at that season, and with my old dog Jet, a better retriever than whom never stepped, and James Keay, our head-keeper, the personification of geniality and good nature, passed some very happy days, trudging quietly round the edge of swamp and wandering round the moor and woods. In this manner a single gun, knowing the ground well, could get as good a bag as half a dozen could have got, as the ground was not the least disturbed, and the Snipe and Duck, after swinging round and round once or twice, would settle in other parts of the Bog, and could sometimes, if the day was fine, be flushed once or twice before they would finally take their departure. A good and varied bag was sure to be obtained, provided one did not mind a bit of a wetting, and in some places a rough walk. Perhaps the three odd days taken from my game-book may be of some little interest to my sporting readers:—

Date.	Place.	Guns.											Total.	Remarks.
			Hares.	Rabbits.	Partridges.	Pheasants.	Woodcock.	Snipe.	Duck.	Grouse.	Blackgame.	Teal.		
Aug. 10, 1885	Bog, Murthly.	1	3	2	1	22	2	7	2	20	64	Shoveller, Roe, Pheasants, and Partridges seen.
Sept. 28, 1885	Fields and Bog.	2	7	4	68	..	1	17	2	1	1	4	107	Did not get to the bog till 6 P.M.
Oct. 7, 1885	Bog.	1	3	6	24	15	3	10	5	1	3	1	67	Capercaillie, Roe, Shoveller, Wigeon also seen.

The above were all shot in the ordinary course of a day's shooting, without searching for any single species to complete the variety.

But to return to our subject. Blackgame will often sit well in woods during the winter after a heavy fall of snow, and a good bag may sometimes be made, where birds are at all numerous, by working them up from the deep heather and bracken with a couple of spaniels, or a steady old retriever well broken against running in and taught to hunt close. Whether it is that they do not observe the approach of the sportsman when lying so much below the ground-level, or that they

* Sand-Grouse were seen there (1889) by James Haggart, the under-keeper.

adopt squatting as a means of concealment, without having placed a sentry as they generally do, one cannot very well judge; but one is almost startled by the sudden manner in which a Blackcock can rise from beneath one's feet without being noticed on the white carpet around. Another and another immediately follow his example, and after you have discharged your two barrels with effect or otherwise, it makes you interested to examine the spot from whence they have sprung. But you will find nothing to reward you but a slight depression in the snow, and no indication to show that they have been burrowing underneath it, as some foreign naturalists affirm they do. Perhaps the snow is neither of sufficient depth nor of long enough duration to warrant the birds doing so in this country. I have seen Partridges in a snowstorm lying huddled close together behind a bush, allowing the snow to drift over them till only their heads were visible.

Numbers are annually killed at the stooks in autumn, and few Highland sportsmen have not sat behind their hastily devised barricade of sheaves to wait the coming of the birds in the early morning or evening—generally the latter time, as one does not much care to bestir himself before 7 A.M. when he has had a hard time of it on the previous day. It is most exciting sport whilst the birds are coming, and in many a northern shooting it is about the only way in which they can be got, when the ground does not admit of driving. When they first commence to feed on the corn they are most tame and unsophisticated, and it is not until they have been frequently disturbed at their feeding-grounds, and the winter season has well advanced, that they again assume their naturally shy disposition. I have often seen them, when fired at with both barrels and coming straight at the gun, complacently alight within ten yards of their would-be destroyer, and give him time to reload and do some more shooting as they moved off again.

Comparatively speaking, in the Highlands, but little systematic shooting of Blackgame over dogs takes place, except where the birds move off the ground at a later season, or where the ground is of such a rough and wild nature that driving cannot be performed with success. The sport cannot be said to be good, unless we consider the pleasure of watching the dogs working, which is always delightful, and therefore the birds should be left till a season when they will be both more fit to shoot and afford infinitely better sport. And after a few seasons, when driving has become the usual thing, the birds, even in the early part of the season, will soon become very shy, rendering the shooting over dogs a matter of uncertainty, so that the sportsman who owns good Blackgame-ground must take his choice between the two forms of sport and please himself; but he will do wisely by choosing the latter, for he will thereby kill off a large number of the old and useless birds, and give a chance of getting the younger birds to breed, which are in reality in their prime, though they are not able to hold their own in the battles with the old and hardy stagers who monopolize the harems.

In the good old days when Blackgame were far tamer and more numerous than they are now, old sportsmen will tell you that they could be shot by walking up, right on to the end of the season, and that they were in nowise wilder than Grouse fifty years ago.

There are always certain spots on or about a moor which Blackgame love to frequent. These will be pretty sure to be certain finds for them, except during feeding hours, provided they have not been driven to seek shelter in thick cover during rough weather, nor have been previously disturbed; and a good keeper who knows his work, and has studied the line of flight taken by the birds on leaving, can, with a couple of beaters, move them in the required direction much more



HYBRID BLACKGALL AND GROUSE
Shot at Glen, Macaruso, Inverness, N.B. Sept. 14th 1889.

easily than Grouse or Capercaillie. The old bird on the watch raises his neck for a second on apprehending the danger, and immediately the whole pack rise on the wing and take a line, often a very circuitous one, towards one or other of their favourite abodes, generally crossing in their flight one particular point, which of course will have been ascertained by the keeper, and where the guns will be placed. They are as obstinate sometimes as Roe, and often one man, judiciously placed, will have the effect of getting the birds forward, where a number would fail. I am only now speaking, of course, of incidental or quickly improvised drives, such as one frequently has in the course of a day's shooting in the Highlands, and where birds are not necessarily plentiful. Big days at Blackgame are, alas! few and far between now, there being but very few places where more than fifteen or twenty brace are ever got in a single day*. In Dumfries and Roxburgh, and the Borders, good bags are still obtained, and then they are driven with the beaters worked in much the same manner as Grouse-driving, which needs no description. When being driven Blackgame will not split up their packs to the same extent that Grouse do, and consequently, should they stick to one line of flight, as they often do, one man in a line of guns will have it all his own way, while the others have to look on and inwardly criticise his performance. Therefore, if only Blackgame are being driven, and no chance of other game is expected, the guns should properly be posted close together in certain places where the birds will be sure to pass.

In the early part of the shooting-season, to men acquainted with their habits, there are few birds that can more easily be poached than Blackgame. The poacher has only to watch the line of flight of the hens and broods as they retire to some secluded bank of rushes or peat-bogs to pass the night, and with his net he can easily secure the whole covey. In Scotland but little of this is done, but in the North of England and the Border counties the silk net is a good deal in use. Most of the poaching that is done is carried on by labourers during the harvest time, and in some of the Northern counties, were it not for constant watching, it would become systematic. A snare of small wire or horsehair is artfully fastened to the ground, or to a stick concealed amidst the stooks, and is either placed at the base of the sheaves or allowed to project amongst the ears at the top, so that birds feeding in either place run every chance of being caught. It is a curious fact that women become the greatest adepts at this form of poaching; and I know of two girls, the daughters of a farmer in Banffshire, who killed in one season over two hundred Grouse and Blackgame by means of these snares. These fair ladies would have little bets with each other in the morning as to whose snares had been the most successful, each knowing her own by a piece of coloured worsted attached to the wire. A travelling hawkker used to come twice a week and take away the stuff to Banff or some other neighbouring town, where it was soon disposed of.

Another very clever, and in former days highly successful, method of killing these birds is for the poacher to erect over himself a little arbour of sheaves, when the fields have been cleared of the stooks. He knows well that, so long as there is a single stook left standing in the field, the birds will come to it, in preference to hunting for the food which is scattered all over the field; and, in addition to this, Blackcocks always like a situation to feed in which gives them a

* In two days' covert-shooting in November 1880 at Cuisachan, Lord Tweedmouth's beautiful place in Ross-shire, 150 Blackcocks were killed amongst other game.

commanding view of the surrounding country, so that even when feeding they may be well on the alert to guard against surprise. He therefore erects in his ambush a stake to support the sheaves around him, and of such a height as to make another stake, fixed at right angles, a comfortable perch for the arriving birds to pitch on, and feed on the ears of corn around them. For a man of ordinary height, this cross-bar is then within easy reach of the arm when extended, and it only requires caution and adroitness on the part of the poacher to be successful in pulling down his unconscious victims within his hiding-place. A stuffed Blackcock will also tend to attract the



YOUNG BLACKCOCK IN STATE OF CHANGE.

others to the spot. This mode of capturing Blackgame is now becoming a lost art amongst the poaching fraternity, and is, I fancy, but rarely practised now. It has too many discomforts, and requires too much patience where birds are scarce, as they are nearly everywhere now-a-days.

Another somewhat deadly method of capture is by clearing a small space in the centre of a wood, where the birds are known to resort to rest or feed during the day. The ground is cleared of all the sticks and heather, and thickly strewn with corn etc. in the centre, which is surrounded by a network of nooses, through which the birds must endeavour to pass to get at the food. I have never seen this done myself, but have been told by keepers that poachers often



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GRUPPEN VON GROSSE

Varieties of the Grouse from the collection of The Honble. W. Rothschild

practise it with success, particularly when Pheasants can be caught as well, and it is worth their while to try for both.

The adult plumage of the Blackcock begins to show itself in the young bird about August 20th, and is complete by the beginning of October, in point of colouring, though it is not until the third season that it really becomes quite perfect, and the tail, the bird's chief adornment, has attained its complete length and graceful curves. The young males of the first year can easily be recognized during the winter by the brown ribbings on the crown of the head and white markings on the throat, as well as by the incomplete shape of the tail.



VARIETY FROM THE COLLECTION OF THE LATE J. MARSHALL, ESQ., TAUNTON.

Blackgame, like the rest of the Tetraonidæ, have the two kinds of plumage, the dark and the light—specimens of cocks varying from those figured in the coloured Plate as a typical male, to others which appear almost entirely black and which show hardly any of the bronze-blue on the neck and back. In these very dark birds the tendency to melanism generally shows itself by the white feathers covering the vent being ribbed more or less broadly with black. One killed by John Sutherland, Lord Cawdor's keeper, had thick black bars across every feather under the tail.

The number of species with which Blackgame have been known to interbreed is larger than that of any other game bird. These hybrids are of very rare occurrence, and, with the exception of the cross with the Capercaillie, are not likely to be met with by sportsmen. The other kinds with which they have been known to breed are Grouse, Pheasant, Bantam, and Common Fowl. In Sweden it also crosses occasionally with the "Ripa" or Willow-Grouse, of which there is a good specimen in the Dublin Museum. The hybrid with the Pheasant is by far the most beautiful and interesting; and the specimen belonging to Mrs. Hunter, of Glen App, Ayrshire, from which the Plate is taken, is the handsomest hybrid of any game species I have ever seen. It is usually the case that, in most of the crosses with which the Blackcock has anything to do, the young take very strongly after him, and are generally of a very plain and black appearance, without possessing that noble bird's individual beauties, but in this specimen the characteristics of both the parents are perfectly distinct.

The crosses with the Grouse are usually very dark, and I have selected the specimen that is drawn in the illustration from amongst some twenty that I have seen, as it is the only one where the markings of the Grouse are distinctly contrasted with those of the Blackgame.

As in the case of the Capercaillie, any form of variety in Blackgame is extremely rare, and I have never had the good fortune to see any more advanced in albinism than the specimen of which I give an engraving, and the pale hen in the coloured Plate, with Mr. Rothschild's varieties, which is from my own collection*. Even in Norway, Sweden, and Russia, where vast numbers of the birds are slain annually, it is very rarely that varieties occur, though at one museum in Norway (Bergen, I think) there are no less than eight or ten of these pied birds. Some years ago, when I was driving to fish at Loch Freuchie, a Greyhen, whose wings were nearly pure white, rose from the side of the road and flew off in the direction of Amulree. I made inquiries afterwards, but it was not shot that year on any of the adjoining shootings.

Although, of course, the number of Greyhens in Scotland far exceeds the number of Capercaillie hens, I have noticed that it is very much rarer for the former to assume the plumage of the male than the latter. The fact of being injured in the ovaries, or diseased from other causes, does not necessarily imply that the bird will change her feathers to those of the male, even to a slight degree, and Greyhens prove this, being often killed when barren, or injured by previous wounds, without displaying any signs of change, though a far greater number must be annually wounded than of Capercaillie hens. It is very curious that one species of Game should be so much less liable to it than any other, and that, comparatively speaking, it should occur ten times as frequently amongst Capercaillie and Pheasants as amongst the birds in question. I have only seen about ten of these Greyhens which had assumed the cock's plumage and which had been killed in Great Britain, and two of these are given in the coloured Plate. The dark bird was shot by Capt. Barlow, of my regiment, at Lendrick, near Callander, N.B., and I had a good hunt amongst a pile of Grouse and bleeding Hares to discover the bird. He said he had shot a "funny young Blackcock with a lot of grey feathers in its plumage"! That was enough to send me flying off to rummage amongst the spoils, but, before I had got halfway through the bag, it suddenly dawned upon me he was having one of his usual little jokes at my expense, which my brother officers, and he in particular, occasionally indulge

* Two Blackcocks were killed in December, 1890, in Lanarkshire, by Mr. J. Allan, of Glasgow, which were speckled all over with white feathers.



DRIVING BLACKGAME.

in, knowing my propensities. However I soon forgave him when I discovered the object of my search*.

The Hon. Walter Rothschild has been kind enough to grant me the use of his collection of varieties of Blackgame, and I have selected a few of the most striking examples of Greyhens to figure.

* A bird of very great rarity is the variety in which a Blackcock assumes to any extent the plumage of the Greyhen. The example which I have figured is, I believe, unique, and, with the exception of two cock Pheasants undergoing the same change, is the only example of this extraordinary variety I have ever heard of. This bird was killed in Russia, in November 1869, according to the label attached to it; the condition of the plumage bears this out, as it is not like that of a Blackcock killed in August, only the heads resembling each other. The plumage of the Greyhen will be seen intermixing throughout the plumage with that of the Blackcock. No account has to my knowledge been given in any work on Natural History concerning this variety; the extreme rarity of its occurrence has probably caused it to escape the attention of naturalists.





CR. CASE (LAGOPUS SCOTICUS)

Three Types of these. (Left figure) Yellow form, from Co. Wick, Ireland. (Center figure) Breeding plumage. (Right figure) Dark form, Breckshire.



Red Grouse (Lagopus lagopus scoticus) in different plumages. (Left) Red. (Centre) Black. (Right) White. From Dumbartonshire.

GROUSE.



ROUSE have proved the greatest success of all birds of the chase, and their steady increase during the past 50 years is an achievement of which the game-preservers may well be proud. A careful study of the bird's habits and requirements has shown the sportsman what may be done in the course of a few years to further the increase

of his stock by good watching, vermin-trapping, and judicious heather-burning. The care bestowed on Highland moors during the last fifty years, with these necessary precautions, has made all the difference in changing desolate tracts of boggy moorland, on which a few stray birds contrived to eke out a precarious existence, surrounded as they were by Kites, Eagles, and Foxes, into stretches of heathery moorlands, where heavy bags can now be obtained.

Grouse, then, may be said to be to the Highland laird the veritable golden goose, for such has become the esteem and pleasure with which grouse-shooting is looked upon by the "Sassenach," that immense tracts of country, the right to shoot over which could once have been had for a mere trifle, are now split up into several moors, each of which may perhaps command a rent of four figures.

During the raw and boisterous days of winter the sportsman or naturalist, be he ever so keen, has but few opportunities of observing the habits of this species. Birds are no doubt quite as sensitive to the weather as ourselves, and the beauty cast over their surroundings by the genial warmth of the sunshine has as much influence in causing them to be bright and cheerful as muggy and wet weather has in making them dull and listless. It is only during that rare climatic phenomenon, a really fine winter's day, that the sportsman ever has a chance of observing their habits and strange attitudes. He is then, in all probability, sitting crouched in

the wet behind a shelter of sods and heather, and will have but a few minutes to make his observations, for the first shot that is fired along the line of guns will bring to an end the peace and security of the little family-parties that are disporting themselves in the immediate foreground, and the thoughts of the sportsman will have to be changed from peaceful observation to sterner realities. Spring is therefore the time for observation, and a man wishing to study the habits of birds and animals will learn more of interest in a few days at that season than at any other. This necessarily entails early rising, to which all are not partial. He will, however, soon become warmed with his walk to the moor, and when comfortably ensconced in the middle of a whin or juniper bush the cold will not be felt so much, and he will soon become engrossed with the beauties of nature that are each moment awakening around him.

Grouse at this season are by far the most restless of all the game birds, not even excepting Partridges. A cock bird may be seen chasing a hen for hours together, the latter taking only very short rests every few minutes, and even whilst on the ground she is seldom still, but struts



GROUSE RESTING.

about pretending to pick up imaginary scraps of food, all the time emitting her peculiar cheeping note, which is only to be heard at this season. The cock, meanwhile, at intervals chases her, or flies up into the air to a height of fifteen to twenty feet, crowing vociferously, and, on again alighting, resumes his pursuit of the hen. This performance is repeated several times, till the hen has obtained what she considers to be sufficient rest; thereupon she flies off again, rapidly twisting, and turning quickly from side to side like a Snipe, in her endeavours to escape from her hotly-pursuing swain. It is extraordinary to see the marvellous rapidity with which the latter can change the motion of his body and wings in exact time and accordance with that of the hen, so that the movements of the two seem to be actuated by the same impulse.

During this period of love and war Grouse become exceedingly tame, and I have seen them alight, without betraying any signs of fear, within a few yards of the bush in which I have been seated in full view. On such occasions as these, if one is able to imitate the call of the hen

fairly well, the cocks will become greatly excited, and will fly round about and endeavour to draw the imaginary enchantress from her place of concealment with all the arts and blandishments of which they are capable.

Grouse are no exception to the rest of the game birds in respect of the pugnacious qualities which they develop in spring whilst the selection of their respective mates is in progress. Males in the attitude of fighting erect and expand the tail much after the manner of Blackgame, which species they closely resemble at a distance; and as the cock Grouse at intervals throws up his wings on striking, he thus presents to the spectator the flash of white which is so noticeable when Blackgame are engaged in conflict. So closely do the two species resemble each other at a distance, that, were it not for the difference in the sounds they emit, it would be difficult for the observer to distinguish between them.

When cock Grouse are fighting, the contest is savage enough as long as it lasts; but this is usually not protracted, as there are seldom more than two engaged, and one or other of the



GROUSE DISTURBED.

combatants, when he finds he is likely to come off second best, proceeds to make himself scarce. Generally speaking, the vanquished one, during the few moments of contest, has had such a rough handling that he is only too glad to clear out altogether; yet it often happens that the one which at the beginning got the best of the fight becomes so highly elated with his success that he follows up his victory by chasing his opponent to a short distance, when he finds to his surprise that his adversary is not so completely humbled as he expected, and is himself in turn attacked and utterly routed. These running conflicts may perhaps last for some time, if the birds are evenly matched, and no one takes so keen an interest in them, or is more highly delighted at all the row that is going on, than the lady herself: she runs backwards and forwards, chuckling to herself, as if it were a matter of supreme indifference to her as to which should ultimately win, provided there is a good fight for her. Although Grouse are not naturally armed with such a powerful weapon of attack and defence as Capercaillie or Blackcock, yet they sometimes contrive to maim each other so

severely as to be completely blinded and rendered quite helpless from the injuries inflicted to their eyes*.

In the Northern Highlands, where the weather is very unsettled in the spring-time, fine warm days in April, however much pleasure they may give to us, are by no means to be desired so far as the nesting of Grouse is concerned. The promise of this summer-like weather is too

often a dismal fraud; and many of the unfortunate hens, after leaving their nests to feed, on returning very



THE FRINGE OF THE MOOR: GROUSE PAIRING IN THE SPRING.

frequently find them buried beneath the snow. When their first nests have been thus destroyed, Grouse are not nearly so ready to make another and lay again as the other species are; so

* Contests in which more than two take part are unusual. On one occasion I saw four cocks all engaged at one time: at first three of them were chasing the fourth unfortunate, presumably a younger cock, whom they considered had no right to be there; but after a bit the latter bird got into a good defensive position on a grassy knoll, where he stood his ground so well against unequal odds, that at length the other three accepted him as being worthy of their attacks, and commenced turning their attention to one another. So furiously did they fight for some moments that one old fellow, who had evidently made up his mind not to give way an inch, reeled up and fell exhausted against a peat-hag, where he contemplated with nodding head and halting breath the action of the others, till he had gained sufficient breath to enable him to get on his legs and go in again. The hen meanwhile never ceased running round and round the combatants, uttering as she did so her peculiar cheeping note, and she did not seem at all distressed at the quarrels and jealousies which her presence had roused. Most unfortunately I did not get an opportunity of witnessing the termination of this interesting battle, as my dog "Jet" had, unknown to me, also become interested in the proceedings, and seeing the birds in front tumbling about in a distressing manner, very naturally came to the conclusion that it was high time they should be retrieved. The hen was the first to observe her, and when she had approached to within ten yards at once gave the alarm. It was wonderful to see the alacrity with which the cocks obeyed the signal, and, despite their wounds and bewildered senses, pulled themselves together and immediately flew off almost simultaneously.



99. 'Miaio
Fort George 1891

GROUSE SHOOTING.

that cold and inclement weather in the early summer, provided it is not so severe as to cause a check to the growth of vegetation, is really rather a thing to be desired in the interest of Game prospects.

Grouse are, like Partridges, the best of parents to their brood, the cocks, as well as the hens, taking the utmost care of the family, and protecting them to the best of their ability from the various dangers to which they may be at times exposed from the attacks of vermin. The cock is generally close at hand, and, on a warning note from his better half, is soon on the spot ready to give battle to the furred or feathered foe that for the moment is threatening the young brood. He is at this season an exceedingly plucky bird, and will, in the defence of his family, blindly attack almost any creature (except man) which may approach too near or interfere with them. The birds of prey, and animals which at other seasons they would flee from in terror, are assailed with all the fury that they display towards one another in their contests. I have seen one beat off and chase a Hooded Crow that had by chance come within two hundred yards of his family party: even this appeared to be considered too close quarters for safety*.

The watchfulness of the old hens at this season for the safety of their brood is so great, and their power of detecting danger on its first appearance so acute, that it is difficult to watch their habits. One cannot get near them without being observed, and they are difficult to find even with a good glass. When they are discovered, however, one will be struck with admiration at the care and attention which the hen pays to each individual of her family, now running to catch flies for one, or pulling up the tender shoots of grass and heather for another, and inducing the little one to eat by pretending to do so herself. Even a caterpillar that she considers too large for one is divided up into separate pieces for the greedy mouths that are expecting the choice morsel.

Her care, too, does not cease even after the young birds are well grown, and, from the sportsman's point of view, sufficiently capable of looking after themselves. What shooter at the beginning of the season does not know the familiar "coq, coq" of the old hen? Has he not often seen her running in full view in front of the pointing dogs, trying every inducement to warn her family of their danger, sometimes even rising herself for a yard or two out of the heather, and, when she finds her efforts to make them take wing of no avail, dropping down again, a piece of self-sacrifice which often costs her her life?

Grouse have but few curious attitudes which are peculiar to themselves, their movements on the ground much resembling those of Blackgame or Partridges. One thing, however, which is noticeable is the dainty manner in which they carry the tail during wet weather or when snow is on the ground. They seem to have a particular aversion to getting this appendage wet, and consequently carry it high in the air, where it will not become bedraggled and uncomfortable. They also erect and expand the tail when fighting, after the manner of the Blackcock.

Excepting in the extreme northern counties of Scotland, its adjacent islands, and the west of Ireland, unless unusually fine weather prevails, Grouse soon become unapproachable and

* Donald Ross, the keeper at Eskdale, Strath Beuly, told me he once saw a cock Grouse keep at bay a Sparrow-Hawk that was attempting to seize one of his young. The hen gathered all her chicks under her, and squatted down closely in the heather, whilst the cock dodged backwards and forwards under the Hawk, and exposed his breast whenever the marauder attempted to pounce. This lasted for some five minutes, till the Hawk became disgusted and beat a retreat without having effected his purpose.

shy after the first month of the shooting. They are more easily influenced by changes in the weather than any of the other game birds. On a wet and stormy day the birds become so unsettled that covey after covey can be seen moving off far out of shot, although they have not yet, perhaps, heard the sound of a gun. A covey that has been moved on a hillside will, in the course of its retreat, give the warning to all others over which it passes, and should it not succeed in taking them with it, will at any rate give them due warning of the danger that they know to be approaching and the direction from which to expect it. The reason is, that on wet days Grouse will not remain in the dripping heather, where their plumage



THE HIDDEN HAND.

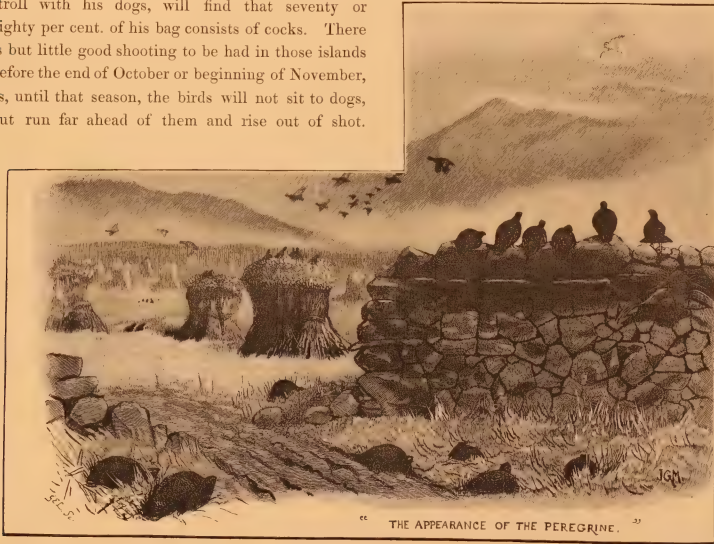
becomes wet and heavy, and where the water is forced in under their feathers by the soaking shoots of ling. They consequently prefer situations where, although more rain falls on them, it will run off again, and will not adhere or penetrate to the same extent. Sitting thus in the open on bare patches of ground, or on cairns of stones, they naturally have a very much better view of the surrounding country, which, in their unsettled condition of mind and body, renders them quick to take alarm at the slightest cause. As the season advances, should wet weather still continue, these dry and commanding situations soon become more and more resorted to, till packs are formed which may perhaps remain together through the rest of the winter, unless it becomes more rigorous, when it is not unusual for the whole stock of Grouse on a moor to merge into one huge pack. They then leave their usual haunts and search the low grounds in quest of food. Such was almost universal in the winter of 1880-81, which was probably one of the most severe winters for the birds ever known.

The driver of the Inverness and Balnespick Coach told me that one morning, in the month

of January of that year, when passing over the flat near Moy Hall, he encountered what he estimated to be a pack of several thousand birds, many of them being so benumbed with the cold that they hardly had sufficient strength to move out of the way of the horses' feet. The whole of the low grounds, which he pointed out to me, were literally black with them, and they probably constituted the whole stock of birds from the surrounding hills.

Under ordinary conditions, after the middle of September the two sexes separate, the hens going by themselves in parties of from five to seven, and the cocks leading either a solitary existence or going about two or three together. One of the most curious facts that strike one when Grouse-driving is that, in shooting certain beats, no birds but hens are killed, and a day or two afterwards perhaps none but cocks. Doubtless the hens have their own particular beat, which they resort to regularly if undisturbed, and it does seem strange that on a particular day it should be deserted and the cocks take their place.

In the Orkneys Grouse somewhat vary in their habits from those of the mainland of Scotland. When the two sexes separate in October the hens always become much more shy than the cocks, so that a shooter in November, taking a stroll with his dogs, will find that seventy or eighty per cent. of his bag consists of cocks. There is but little good shooting to be had in those islands before the end of October or beginning of November, as, until that season, the birds will not sit to dogs, but run far ahead of them and rise out of shot.



They seldom pack, and unless forced together by driving they remain singly or in little parties until February, when they pair. They also differ in that they are remarkably silent birds, being hardly ever heard to crow.

It is very rare for Grouse to alight elsewhere than on *terra firma*, yet they may at times be seen sitting on stone walls or, more rarely, wire fences. They do, however, occasionally alight

on trees, or, to speak more correctly, bushes. In Westmoreland, in the winter months, when food becomes scarce and a change of diet is necessary, the Grouse sometimes leave the fells and descend to the upland pastures, where they may be seen sitting on the blackthorn bushes, eating the red berries. But in Scotland and Ireland such are not their habits, save in very severe winters, when their natural feeding-grounds are buried beneath the snow, and they are forced to come to the low grounds to search for whatever they can pick up. During the winter of 1880-81, when the Yorkshire Grouse were driven into the farmyards and became so tame as to feed with the poultry, many of the Inverness-shire birds probably owed their existence to the food which they obtained from the blackthorn and rowan trees. A crofter on the margin of Loch Ruthven in that county told me that every day during the month of January, when there was a depth of five or six feet of snow over the whole country, he had seen the Grouse sitting on the blackthorns



"EMBARRAS DES RICHESSES."*

and eagerly devouring the hips and haws, looking like so many Blackcocks. When the snow eventually cleared away, numbers were found lying beneath the bushes, having died from starvation when all the berries were exhausted.

It is, of course, difficult for birds furnished with so feeble a development of the hind claw to maintain anything like a steady perch when sitting on trees, but with practice they are perfectly able to do so. In addition to the Tetraonidæ, most of the Gallatoræ (Waders) are quite at home in trees, two of them, the Wood and the Green Sandpiper, even nesting in them. A curious instance of how habits, such as I am referring to, may be acquired, was related to me by a friend of mine who resides in Westmoreland. He procured a setting of Grouse eggs from the moor and placed them under a bantam hen, who in course of time hatched them all. Some were accidentally

* The above incident happened to my brother in Aberdeenshire in 1887, when a covey of Grouse, after being flushed several times, eventually became so confused as to take refuge in his butt.

killed, and the others died from various causes, except one cock, which thrived well and was greatly attached to its stepmother. Every evening the bantam used to repair to a large beech tree near the house, in which she was in the habit of roosting when unencumbered by family cares. So when she was allowed to remain out for the night her first thought was to make for her old perch, to which she considered the youngster was perfectly capable of following, as he could now fly well. The latter, after many ineffectual attempts to keep on his legs, was forced to sleep on the ground at the foot of the tree, for, although he managed to get up to the perch, his efforts to keep there were quite useless, as he always fell off again, either backwards or forwards. However, in course of time practice made perfect, and he acquired such a liking for sitting on the trees that he was often afterwards seen in the daytime flying from branch to branch, appearing to be perfectly at home.

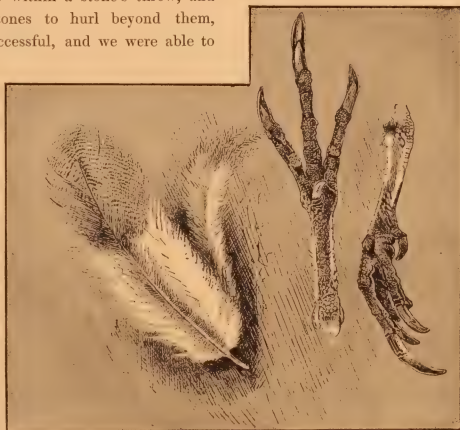
Grouse make most delightful pets, the only disadvantage in keeping them being that they are apt to become far too tame, and consequently a source of annoyance. The bird above mentioned had a particular affection for the lawn-tennis court, and whenever any of the members of my friend's family began to play, Mr. Grouse would always put in an appearance, seeming to enjoy the fact that he was an obstructionist, and refusing to clear off unless forcibly removed and shut up in his pen. If taken to the other end of the grounds, he would almost immediately return to the tennis-court. Such was the sociability of his disposition, that he had absolutely no sense of fear at the report of firearms; in fact he would frequently follow the shooters out to a distance of several fields from the house before he would return home, satisfied that they had taken their departure for the whole day, so that it would be of no use in accompanying them. Every night, before retiring to roost in his beech tree, he would take long flights round and round the house and village, which was close by; and in the course of one of his evening rambles he espied an old man digging, from whom he very naturally expected he would obtain some delicacy, as every one was in the habit of giving him something to eat; but this old scoundrel was a stranger, and barbarously despatched the confiding bird with his spade.

Another that was kept for a long time at Guisachan, Lord Tweedmouth's beautiful place in Ross-shire, became equally tame, and was probably one of the few pets that have not suffered an untimely end. After being kept for several years, he departed as usual in the spring to the hills, where he annually assisted in the increase of the stock, but did not return to the house, as was his wont, during the following winter. He feared neither man nor beast, and became great friends with a certain dog in the house, on whose back he often used to ride. The following instance of his plucky disposition was related to me on separate occasions by each of the two guns who were present when the affair occurred. A shooting party were beating the hillside near the house, when a pointer that was working stood to birds which eventually rose, and some were killed; but as the dog still held, they correctly inferred that there was probably another bird left, which proved to be the case. This happened to be the tame Grouse, whose presence was quite unexpected, and who considered being pointed such an insult that when the unfortunate dog approached near enough to be disagreeable, he flew up and attacked him so blindly that he was with difficulty rescued from its jaws. Like the other tame bird, he seemed rather to appreciate the sound of guns, and always turned up at the covert shoots in the park. On one occasion he was taken to Oxfordshire, where he lived in a garden for more than a year; but the South Country and association with the Sassenach seemed to have a depressing effect on his spirits, for during the whole of his residence there he never crowed or appeared at all happy, so that he was sent back to Guisachan. He soon showed his delight at returning to his native land once

more, for immediately he was let out of his box he ran up to a grassy hillock at once and crowed loudly.

On the appearance of danger the first instinct of a Grouse is to crouch and remain "perdu" till it is past; but when the cause of alarm remains on the spot their powers of patience, engendered by fear, are so great as to make them capable of remaining for hours together in one position. Supposing that both dogs and birds were left alone when the former were pointing, it would be curious to find out to what length of time the actual powers of endurance of each could be strained to. Just before commencing to nest on warm days in spring, Grouse will sit closer than at any other season of the year; they will often allow the passer-by to tread within a few inches of them without betraying any sign of their existence. Some years ago, during spring, I was collecting birds in the west of Sutherlandshire near Loch Naver. The keeper who accompanied me took me to a small loch high up in the hills where the Black-throated Divers came every year, and I was fortunate enough to shoot a pair, which we found the greatest difficulty in getting out of the loch, as the breeze had entirely dropped and the surface of the lake on which the birds were floating was like a sheet of glass. We accordingly sat down on a patch of heather by the loch-side and waited patiently for the wind to rise; this it obstinately refused to do, save in feeble spasmodic little puffs; however, in the course of about two hours it brought the dead ones to within a stone's throw, and we walked about picking up stones to hurl beyond them, a proceeding that was at last successful, and we were able to fish them out—of course, just at the moment when a strong breeze had sprung up that would have brought them to shore in a minute. Being now highly satisfied in having obtained the birds, and as our internal luncheon bells had been ringing somewhat loudly, owing to the vigorous exercise we had been taking, we proceeded to sit down on the heathery bank again and satisfy the calls of the inner man. Hardly had we seated ourselves when a cock Grouse, almost immediately followed by a hen, rose literally out of the bent at our feet, and from a spot that we imagined had been trampled upon dozens of times during the last three hours. The keeper was as much astonished as myself at the extraordinary tameness or inaction displayed.

The flying-powers of Grouse, although at times extremely rapid, are far inferior in point of endurance to either Blackgame or Capercaillie. They seldom cover distances exceeding two miles at one stretch, unless unusually harassed in stormy weather, or scared from their ground by Hawks



THE DOUBLE FEATHER FOUND
IN GAME BIRDS.

SHOWING MANNER IN WHICH
THE CLAWS ARE CAST.

or the artificial Kite. The usual length of a Grouse's flight ranges from a quarter to three quarters of a mile, depending entirely of course on the nature of the ground over which they are passing, being as a rule much shorter on heather flats, where they have numerous and agreeable resting-places, than on broken ground and rocky hill-faces. In a discussion which took place in the 'Field,' I noticed that most sportsmen were of opinion that Grouse were incapable of flying four miles; but I have twice seen Grouse on the wing when they were crossing the "Bring," a wide channel which separates the islands of Hoy and Pomona, Orkneys. The fishermen told me this distance, at the spot where I was sailing, was quite four miles across, and the birds must have come at least another mile on the Pomona side from the point where they left the moor.

Grouse feed much about the same time that the other game birds do, namely, soon after daybreak and an hour before sunset. Perhaps they remain somewhat later at their second meal than the other species do. Those birds which may be still seen on the stubbles after dusk are nearly always parties of hens, who seem to prefer to take their meal later than the cocks. Perhaps it is the strong instinct of self-preservation in the hens which guides all their movements during the autumn and



winter months; they are far wilder than the cocks once they get into their little parties, and the strolling gunner, late in the season, on laying out his bag at the end of the day, will find but comparatively few of the gentle sex amongst his victims. Also, when shooting under the Kite, one will most probably not count a single hen in the entire bag; during the day you have seen them making off in little coveys consisting of five to ten birds, on the very first view they obtain of their dreaded enemy, and have not deemed concealment by crouching amongst the heather a sufficiently safe expedient.

Although shooting under the Kite has been much deprecated, it does not always follow that its use is ruination to a moor or in any degree unsportsmanlike. A shooting tenant will do more good than harm by the use of it for a couple of days at the end of the season, where driving is not practised and the birds are unapproachable. When only resorted to but once or twice during the shooting-season it does not have any effect in driving the birds off the ground, as the continued practice of it would do, but only sends perhaps a few coveys of hens over the march: the latter, being far more terrified of the Kite than the cocks, take long flights and are all the better for having their lives spared; they remain away for the rest of the day on which they have been

disturbed, but will return to their own moor the same evening to roost, or during the next day. It has, however, one drawback, which is, that if your neighbour happens to be shooting on that particular day, and comes across these coveys of hens, he can make great havoc amongst them. Should he be beating up towards the march over which the birds have lately come, they will then generally lie very close or rise before the guns and endeavour to break over the line rather than return to the moor from whence they have been scared.

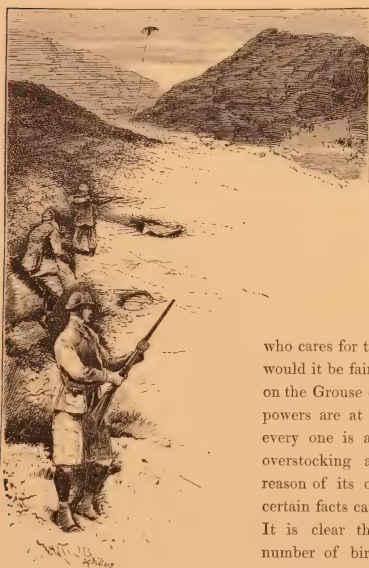
The best wind for working the Kite is one coming directly from behind the guns. The Kite should then be made to sail along in front of the centre of the line, about a hundred yards ahead, and when the birds rise, which they frequently do at a distance of about 70 or 80 yards, they come dashing back towards the guns at their greatest possible speed, affording some really pretty driven

shots. Most birds will, however, sit close till the shooters are upon them, and then rise quickly behind or before, giving nice snipy shots and taking straight shooting.

As Grouse-shooting is a subject which has been already hackneyed to the last degree, and one with which every sportsman is only too well acquainted, it would be presumption on my part to deal with that which has been so ably set forth already by one of our best of sportsmen and shooters, Lord Walsingham, whose article in the 'Badminton Library' nearly every one

who cares for the sport has read and is familiar with. Neither would it be fair to inflict on my kind readers a long dissertation on the Grouse disease, its causes and subsequent cure. Human powers are at present unable to cope with it, though nearly every one is aware that neglect of a moor, in the shape of overstocking and insufficient heather-burning, is the chief reason of its occurrence, and only good care and attention to certain facts can ensure the prevention of this terrible scourge. It is clear that no moor is able to hold above a certain number of birds per acre, and when the place has become overstocked, whether good Grouse-ground or otherwise, and the disease once started, it spreads so rapidly that the estate may be decimated in a week, and it may extend its ravages over

the whole country. If the reader will look carefully into statistics of the shooting-seasons during the past thirty years, he will find that in nearly every instance the disease has broken out in the year following an exceptionally good season. Apparently too many birds have been left for breeding purposes; and when these have exhausted the supply of good nourishing food, in the form of young heather, they are forced to live on the old and rank herbage, &c., which has the effect of generating the disease and causing the tapeworms to grow.



"A SNIPY ONE UNDER THE KITE."



GROUSE DRIVING.

No bird has such extraordinary variability of plumage as the Grouse, and it would not be at all difficult to write an entire volume on its various changes and forms of dress; but as space forbids I have done my best to condense these as much as possible to render them comprehensive to the reader in a small space, and I think that the figures given may be of some interest, though I have found it impossible to give illustrations of all the changes in feather-casting, which are in reality coincidental in their number with the Ptarmigan. Like that species, Grouse are practically in a state of change throughout the entire year, whether they are actually moulting or merely altering the coloration of the feathers. The red and brown shades which are prevalent colours of the Grouse's plumage are not so striking as the corresponding ones of the Ptarmigan. Therefore these numerous alterations are consequently not nearly so noticeable; and the interest which naturalists take in the Grouse's plumage is not nearly so great as in the case of the Ptarmigan, whereas, in my humble opinion, the reverse should be the case.

The greatest difficulty in working out the Grouse plumage is the fact that many forms or types exist, both as regards the males and females, whilst the Ptarmigan have but the two types common to all birds, namely, the light and the dark.

The following are the normal typical forms of Grouse:—

Males. The Black, the Red, and the White.

Females. The Black, the Red, the Spotted, the Yellow, and the White.

Added to the above are of course all the forms in which mixtures of plumage of two or more of the types appear.

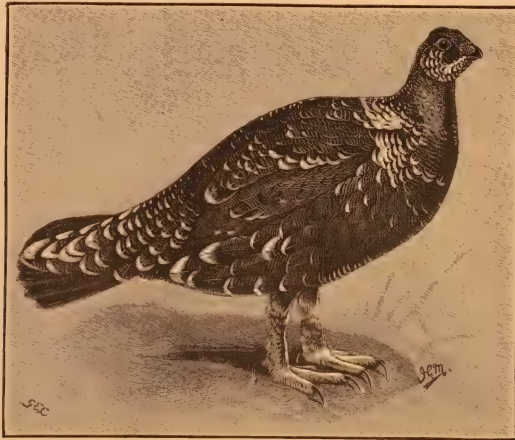
Although some of these forms are as widely different from each other as they well can be, yet during the breeding-season (May and June) there seems to be a tendency towards a common plumage in all parts of the British Islands—the prevailing colour in the cocks being red, and in the hens black bars on a yellow ground; in nearly every case the white breast-feathers disappear.

A few remarks on the forms of plumage in the males, with regard to their occurrence and general distribution, may not be out of place.

The White Form.—To find birds in this plumage two essentials are necessary: one being high latitude towards the Arctic Circle, and the other, height of elevation. When these two conditions unite, the white form is, generally speaking, the result; but it is far from being the case that either one or other of these is sufficient to cause this, and that birds killed in higher latitudes or high mountains are naturally lighter on the breast than others. Orkney birds are not whiter than Welsh specimens, neither are birds killed high up on the mountains of Wales necessarily whiter than Caithness ones. But combine the two, as happens in the mountains of Sutherland, and there, on the highest ranges, you get the white type in perfection. The distance between Westmoreland (where the best English white forms occur) and Sutherland is not really sufficient to show a very great difference in the plumage; but I have never seen any English birds approach the beauty of Sutherland specimens. One of the most beautiful examples that I have seen, and of which I have given an illustration, was kindly presented to me by Mr. J. Hall, of Dalreavoch, Sutherland. It exhibits the growth of the white feathers all over the back and neck, as well as on the breast. It is very uncommon to see the white developed to such an extraordinary degree on these parts of the body, though one will often see a few scattered lightly over the plumage of an old cock of the white type.

In mid-winter, when this particular form is seen at its best, good examples of males will exceed the females by at least four to one.

The Red Form is found in the most marshy bog-lands of our islands; these are notably Ireland, North and South Uist, and the Lews. Why it does not occur in Caithness, where the nature of the soil, being so greatly intersected with water, strongly resembles that of those islands, and where every condition for the birds doing so is fulfilled, is singular. These Red birds are probably the most forcible proof that, at some remote period in the history of the past, the Western Islands mentioned were linked with Ireland into one island, which the encroachment of the Atlantic has in course of time formed into separate groups; and a peculiar fact concerning their habits is their distaste of association with the normal mainland types. I know of two instances in which the latter were introduced into the Lews, where they thrived well, but always kept separate



AN OLD HIGHLANDER FROM SUTHERLAND.

from the Red birds and never interbred with them. The darker mainland birds were always found on the higher ground apart from the other type, and were evidently treated as strangers by them. No doubt, in course of time, they will become assimilated, and the black and white feathers will disappear in favour of the red.

Apparently this Red form is but slightly affected by any geological difference of soil where it only occurs at intervals in the bog-lands. Out of a large series of Irish specimens that I have examined I find but little difference in birds from the swampy ground of the north and south and those killed on the high mountains of Mayo, Connemara, and Donegal, though winter specimens from the latter counties certainly do show a greater inclination to display white feathers on the breast and cheeks. An old Irish cock in his full breeding-plumage at the beginning of May is one of the most beautiful birds imaginable.

The Black Form is the most unusual of the three types and one which is very rarely seen



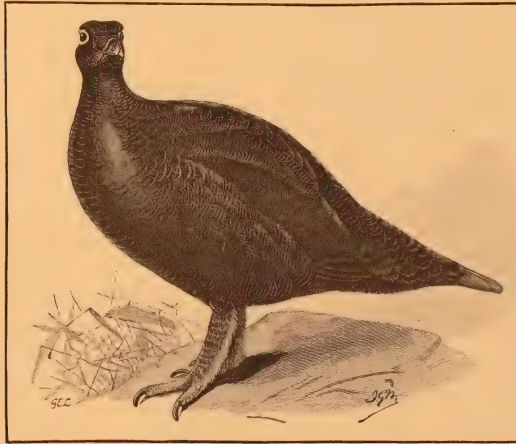
Printed in Berlin

GROUSE (LAGOPUS SCOTICUS)
Allinoc.

Litho W. Greve, Berlin S.W. London E.C.

developed to any degree of purity. It is more often to be found mixed with the Red or the White type, but most commonly with both. When combined with these two forms it is the one most commonly met with by the sportsman during winter, and five old cocks out of six, shot at that season, will be found to be of this description.

The various types to be found amongst the hens are the Red, the White, the Spotted, the Yellow, and the Black. The females of the Red Irish bird are yellow, and not red as would be supposed; they are, however, quite different from what are generally known amongst



MELANISM.

Yorkshiremen as "yellow hens," which latter are finer in the markings of the feathers and lack the boldness of the lines found in the Irish birds, and I am sorry that space forbids my being able to give examples of both the forms, the Irish hen only being figured (see Plate).

Of the types of hens the red is the rarest, and the spotted and breeding-dress birds the most beautiful.

Any sportsman who does much Grouse-driving and cares to study natural history can form a most beautiful and varied collection of the various changes of plumage found in this bird without much difficulty, and one which will ever be of interest to himself and his friends. For the past ten years I have been continually adding to my series, and have now about sixty examples of all the forms and varieties; with these and Mr. T. E. Buckley's, who has been kind enough to lend me his collection, I have been able to work out all the different forms and give illustrations of the most

pronounced types. Art, unfortunately, is but a poor substitute for Nature, and the reader, if a shooter, will do well to form a small collection of his own, from which he will get a far better knowledge of the subject than from any pictures.

As before remarked, the changes of plumage in the Grouse are the same as in the Ptarmigan, and birds will be found to be in full moult in April, August, and October; the latter change, however, takes longer than the other two, and no doubt many Grouse, like the Ptarmigan, retain a greater part of their autumnal dress throughout the winter.

The red dress of the male and barred yellow of the female may be said to be alike in all parts of our Islands during the breeding-season, although the natural difference in shades and marking of the light and dark forms must be taken into account. Birds of the Black type are naturally of a much more sombre hue than the purer Red forms, and the various shades of colour are retained to a certain degree.

From the month of May the plumage of both sexes passes through all the changes mentioned in the case of the Ptarmigan, and every fresh month brings its alteration of feather, either by moulting, discoloration, or both, till by November the bird stands clothed in its winter dress, that shows the type completed in one form or another. Young birds of the year are easily distinguished till the month of September, but by November it is impossible to see any difference between them and the old birds. The mode of determining age by holding the bird up by the lower mandible and judging by its fragility whether it is a young bird, is by no means a sure test; often in September the bill of a young bird will not break, and sometimes that of an old one will when the bird is unusually heavy.

Considering the immense number of Grouse that are annually killed, it is surprising how very few albinos, or coloured varieties, crop up amongst them. Although albinism is more common in the Grouse than in any of the other Tetraonidae, it is very rare to see a complete albino, or even one in which the red or yellow parts of the bird have become white and the black markings grey. More often the feathers assume only a semi-discoloration, and the reds and blacks of the plumage become yellow and brown; or the bird's natural garb is sprinkled with only a few of the pure white feathers. These latter are not uncommon, and I know of one shooting, near Amulree in Perthshire, where for many years there has been a race of birds with white primaries in their wings. But of pure varieties one will see but very few; and during the last fifteen years, in looking over the autumn stock of the London and Scotch naturalists, I do not think I have seen more than six good varieties in any one year. The examples which I have figured in the 'coloured Plates' will probably be comprehensive enough to include any one that the sportsman is likely to come in contact with.

Of the perfectly black variety I have only seen two examples: one having been killed near Perth, and now in the Perth Natural History Museum, and the other, which is the handsomest variety of the Grouse I have come across, was shot near Kincaig, Inverness-shire, October 1889. (See page 57.)

The cream-coloured and buff varieties, especially amongst young birds, are the commonest, whilst the perfectly black are the rarest.

An amusing incident happened to a friend of mine, who is an enthusiastic collector of rarities of all sorts, and albinos in particular. His keeper came running into the house one morning to inform him that he had seen a Grouse on the hills with a pure white back. Great was his excitement, and securing his gun and a few cartridges he proceeded to scour his little moor, where



Printed by Smith

GROUSE (*LAGOPUS SCOTICUS*)
Coloured varieties.

Litho. W. Greave, Berlin S.W. London E.C.

birds were few and far between at the best of times. With great difficulty the white-backed one was at last found, flushed, and missed, owing to his excess of keenness, so he had nothing to do but to trudge manfully after it throughout the entire day. This he did without obtaining another shot till late in the evening and about to go home, when the object of his pursuit rose out of the heather at his feet. This time he did not miss, and his thrill of exultation as the bird dropped was immediately and rudely dispelled when he went to pick up his much-coveted treasure. Alas! for the vanity of human hopes and judgment, his albino had nothing but a patch of frozen snow adhering to its back, and its feathers were the same as those of any other Grouse.

The only species with which Grouse may be said to interbreed in a wild state are the Blackgame. These hybrids, notwithstanding the close association and similarity in size and habits of the



HYBRID BETWEEN A GROUSE AND BANTAM FOWL.

two species, are of very rare occurrence. They are singularly plain and uninteresting-looking creatures, and the bird from which the coloured Plate is taken is the only one out of twenty that I have seen which may be said to have any pretensions to good looks. Most of them are dull and sombre birds, being nearly black all over, with the tail square and the two end feathers on each side considerably elongated, but without any indication of the outward curve which makes the Blackcock's tail so graceful; but the Glen Mazeran specimen is decidedly a handsome bird, and shows well in its plumage the characteristics of the two species.

A most extraordinary hybrid is that of the Grouse and Bantam Fowl. The example figured,

and another which is in the possession of Mr. A. G. More in Dublin, are, I fancy, the only instances of this curious cross known. My bird, which I obtained from Father Ryan, Tipperary, was the only surviving one of a brood, the father of which was a Bantam cock and the mother a Grouse hen. The latter laid several clutches of eggs, but none of these proved fertile except her last sitting, and all of these died in infancy but this bird, which continued to thrive from the first, and after a period of four years, during which it lived in tameness and sociability with the other fowls, it was found dead one morning from no apparent cause, as it was in perfect plumage and good condition. Probably one of the Bantam cocks, of which there were several, had given him a blow on the head which had been too much for him.

It will be seen by reference to the figure that the plumage almost exactly resembles that of a cock Grouse; but what much enhances its beauty is the metallic bloom that one observes on the feathers of a Bantam cock, which suffuses the entire plumage. The general shape of the bird, too, is more or less of a compromise between the two species, even down to the feet, which are entirely Grouse-like till within a quarter of an inch of the nail, and then they simulate those of the Bantam. The tail and bill also betray the Bantam origin, though it is difficult to account for the patch of white which the bird bears at the back of the head, as neither parent had any such marking.

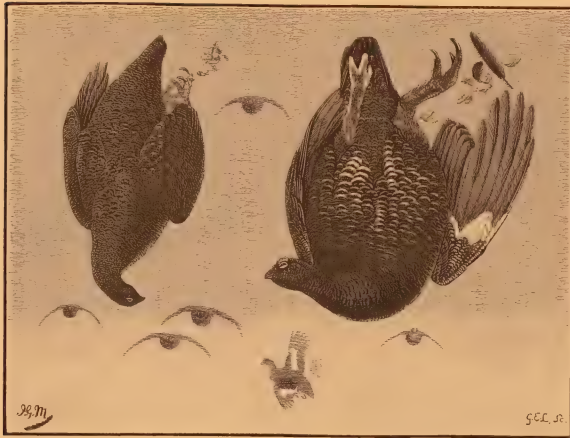
Mr. A. G. More's specimen is quite white, the father having been a white Bantam.

Owing to the similarity of their habits and the close association of the two species, one would be led to suppose that crosses would frequently occur between Grouse and Ptarmigan: such, however, is not the case, as up to the present there is not a perfectly authenticated instance on record. The example given in the notes on the Ptarmigan is the only one that I know of that may possibly be such a hybrid; were it not that some of our best naturalists are of opinion that such is the case, I would not have inserted it, as I myself believe that it is an example of albinism in a Grouse, which has been the case with every other bird supposed to have been the said cross that I have examined. This instance, however, so fully carries out the natural inferences that a naturalist would form in his mind of what such a cross would resemble, that it must be extremely difficult even for the most astute to give a decided opinion as to what the specimen really is.

Ptarmigan and Grouse, although at times found on the same ground, notably in autumn and winter, have their separate elevations to which they adhere more or less closely as the season and weather permit; but during the spring, when pairing is going on, and the weather is fine, Grouse are all mated and settled in the vicinity of their nesting-places long before the Ptarmigan think of holding their matutinal levee for similar purposes, for during this season the two species keep very closely to their respective homes and have therefore but little chance of meeting. Before daybreak the Ptarmigan cocks descend to the verge of the Grouse-ground to feed, but at this hour the Grouse descend also, each working their way upwards on the rising of the sun.

Mr. J. Grant, of Glengrant, Rothes, N.B., kindly informs me that there is an undoubted hybrid between the Grouse and the Partridge in the possession of Mrs. Allan, of Elgin, N.B. There were also two birds supposed to be of this cross shot near Fermoy, Co. Cork, Ireland; but in neither case have I been able to trace their present resting-place. Captain Hughes-Hallett, of my regiment, killed a bird near Stirling, N.B., which he thought was one; but eventually I discovered it in the possession of Mr. J. Peacock Edwards, of Morningside, Edinburgh, when it proved to be a very curious melanistic variety of the Partridge.

There does not seem to be any reason why the Grouse and the Partridge should not occasionally interbreed, but I have never seen an example. The blood-red variety of the Partridge, of which there are several beautiful examples in the Newcastle Museum, sometimes leads sportsmen to think they have got a hybrid of the above-named birds. I have taken several journeys in the hope of discovering this new cross, but in every case the birds proved to be Partridges.





SJÖFÖGEL. HÖRNU. BETWEEN FURUOGAN & GÖRUSE.

Shot at Botradswell, Sutherland, from a Covey of Grouse, Sept. 17, 1873.



LEPUS MUTUS (ARCTIC HARE)

(1) ♂ September (2) ♀ November (3) ♂ September (4) ♀ August (5) ♂ December (a rare dark form) (6) ♀ October (7) ♂ October.
The above numbers signify the figures on plate which must be counted from left to right commencing at the upper figure.



PTARMIGAN (*LAGOPUS MUTUS*).

Normal plumages of the Ptarmigan, showing complete series of changes throughout the year.

(1) ♂ & ♀ December & February. (2) ♂ & ♀ middle of February to middle of March. (3) ♂ & ♀ May & June. (4) ♂ July. (5) ♀ August.

PTARMIGAN.



PTARMIGAN are found in considerable numbers amongst the rocks and stones that crown the summits of nearly all the hills above 1500 feet in the deer forests of Ross-shire, Sutherland, Inverness-shire, Aberdeenshire, and Perthshire, whilst most of the other counties north of Forfarshire on the east and Argyllshire on the west contain mountains on which they exist, and they also occur in many of the Western Isles. The species is not now found further north than Caithness, though, until quite recently, there were always a few in the Hoy hills, Orkneys. It has also been extinct in Cumberland and Wales for some time.

Far away from the haunts of man, in their lofty solitudes, the Ptarmigan lead a life which, compared with that of the other game birds, is one of comparative peace and security. With the exception of the occasional appearance of a stray gunner wandering in to their domain and shooting

a few brace after the stalking-season is over, they need have but little cause to fear the presence of man, since he generally appears in the form of a deer-stalker or passing shepherd and is regarded more as a friend than otherwise. Were it not for the fact that they constitute the favourite prey of the Fox and the Eagle, they would in all probability be as numerous as their neighbours the Grouse; but these deadly enemies, chiefly the latter, are their superiors in point of cunning and powers of vision, and all their constant watchfulness and the additional safeguard that Nature has provided in the shape of the harmonious bleedings of their plumage with the surrounding objects fail to baffle the attacks of the destroyer*.

As the stalker sits disconsolately waiting for the mist to rise, he is often surrounded by the Ptarmigan, of whose presence he was probably unaware but a few moments before. Now they appear to be perched on the rocks on all sides of him, and brighten, to a certain extent, the oppressive and death-like stillness by their harsh though not unpleasant notes. But he sees them not till, perchance, there occurs a sudden rift in the gloom, and the cloak of darkness that has enshrouded him is thrown aside and carried away on the wings of the rising breeze, to reveal in an instant a picture the surpassing loveliness of which seems doubly enhanced by contrast with the mournfulness of his late surroundings. In the immediate foreground flutter the Ptarmigan, like little white fairies, over the glistening rocks; whilst on the green slopes are grouped in graceful attitudes the ever lovely forms of the children of the mist. Fear and beauty seem embodied in their presence as they stand with quivering nostrils and attentive ears gazing earnestly down the precipice towards some distant corrie from whence wells forth the repeated roar of a mighty stag. To complete the vision, a transient shaft of sunlight lights with sudden force the stems of the birches that fringe the loch below, creating a perfected image in the glassy depths beneath. The scene is but a beautiful picture, to disappear as quickly as it came; and landscape, deer, and Ptarmigan all fade once more as the shroud of mist envelops the hill.

In such scenes of alternate gloom and magnificence do the Ptarmigan pass the greater part of the year, descending only to the Grouse-ground in the early summer mornings or during the severer storms of winter, when Nature casts her white mantle over their homes and forces them to seek their food and shelter at a somewhat lower elevation. Even at such times it is their habit to spend a good part of the day burrowing in the snow, or sitting and basking in the winter sun on some of the more projecting rocks from which the snow may have drifted and left bare.

These rocks are generally chosen as points of vantage from which they can command a good view of all approaches: they can thus obtain an immediate knowledge of the advent of their most dreaded foe, the Golden Eagle, and on the signal being given by one of their number there is a general disappearance and sudden assimilation to the rocks that would certainly deceive any eyes but those which they are intended to. Probably the Eagle has a far better knowledge of the habits of his victims than man, and he knows full well the spots which they frequent at certain hours of

* In the spring of 1888 a colley at Blackmount was observed chasing a large fox down a hill towards his master's house. James McColl, the forester to whom the dog belonged, happened to be standing outside his door as the two came flying down the hill, and was much surprised to see how easily his dog, which was at all times a slow animal, rapidly gained on Master Reynard, who appeared considerably distressed and who took the first opportunity that a large cairn afforded of going to earth. McColl soon had his terriers out, and in a short time the pursued one met his fate in a manner that would hardly have received the unqualified praise of Leicestershire sportsmen. On his carcase being opened, the reasons for his lack of speed were apparent. The colley had evidently disturbed him at his dinner, no part of which he had made up his mind to leave behind, for he had not only eaten the complete bodies of three Ptarmigan, but had also swallowed the wings with feathers attached as well, a piece of gluttony that had cost him his life.



ABOVE LOCH MAREE. PLOVER SHOOTING.



"IN THE FOREST."

the day and the direction of their retreat if flushed. For this reason it is by no means an unusual sight to see the Golden Eagle (generally the male bird) doing a little amateur driving on his own account and that of his spouse. This may be described as follows: while the hen bird takes her post on some overhanging rock on the face of a hill or exit of a corrie, the cock sails away high in the air till he has reached the end of the ground that he intends to beat; he then descends and proceeds to systematically range the rocks up and down as regularly as a setter, in the direction of his mate. Game is soon found, and instead of quickly dropping on to the quarry, which is their usual habit when hunting for themselves, he makes a sudden feint and gets his terrified victims on the wing at once, after which he can always force two or three birds in the required direction by keeping just behind and below them. Although the Eagle, in point of dexterity and swiftness, is but a clumsy performer in the art of slaughter compared with the Peregrine and other Falcons, yet he can generally effect his purpose by keeping the quarry moving forward and preventing some at least from taking sudden downward headers into a snowdrift or chasm, where they would undoubtedly escape. Thus he keeps up with their low scurrying flight with slow heavy flaps of his own wings till the point is at length reached where the hen sits awaiting the coming of her lord, and giving a scream or rather yelp, for it more resembles the latter, he is immediately answered by her, and the two soon drop on their respective victims and retire to adjacent rocks on which to enjoy their meal.

Of late years proprietors of deer forests having awoke to the fact that the Eagles were gradually disappearing like so many of our indigenous birds, have justly taken every precaution to stop their destruction. Seven or eight years ago the slaughter of adult birds was very great, and if it had continued at the same rate there would not have been an Eagle left in Scotland; but now they have greatly increased again, and at the present day there are probably as many Eagles as there ever were. As they do more good than harm in deer forests by killing off the Grouse, Ptarmigan, and Blue Hares, that only interfere with the stalking, there is every reason to preserve them, quite apart from the grandeur and beauty which their presence naturally lends to their magnificent surroundings*.

During the winter, if severe, the Ptarmigan assemble on their own ground like the Grouse, and frequent in packs the stony ridges free from snow†. These packs only unite as a rule for a short time, breaking up at once into their former coveys on the first sign of fine weather and warmth, and remaining so until April, when the pairing-season commences, and each day sees the little party become less and less till all are paired except a few old cocks, who, like Grouse, neither settle down quietly to domestic affairs nor allow others to do so.

Ptarmigan being monogamous, like Grouse, more or less resemble that species in their habits during the spring, with the exception that, like the polygamous Blackcock and Capercaillie, they

* Previous to the year 1883 the slaughter of the old Eagles at their nests was almost constant, so much so that these noble birds were threatened with becoming as scarce as the Osprey now is, and in the naturalists' shops in Scotland, three of which annually receive a large number for preservation, every tenth bird received was an adult; but since then the percentage of old birds killed every year has been gradually diminishing, till in the two seasons of 1888-89 there were only five adults out of about a hundred specimens Mr. Malloch (Perth), Mr. McLeay (Inverness), and Mr. Small (Edinburgh) received for preservation. It would be very difficult to judge how many of the birds bred in Scotland survive, since during the first five years of their existence they are wanderers on the face of the earth, and being driven out of their birthplaces in the safe retreats of the deer forests, are constantly exposed to every imaginable danger from gun or trap, nearly every keeper and shooter being on the look out for them, so that they stand but a poor chance of escaping. However, so long as the old birds are not molested in their homes there is but little chance of their becoming extinct, even if only a few of the young birds pass through their baptism of gun and trap in safety.

† This year (1891) I encountered a pack of at least 50 birds at Guisachan on the 23rd of August, an unusually early date.

have recognized pairing-grounds, to which at daybreak a covey repairs to settle the affairs of love and war. Ptarmigan, however, do not appear to hold closely to any particular spots from year to year, as the above-named species do, but show a decided inconstancy in their selection, sometimes resorting to places that are entirely different in the character of their surroundings from those selected the previous year. At one time the spot chosen will be situated on a flat amongst the slates and slabs of granite on the extreme summit of a mountain, and another in some almost sequestered nook on the steep slopes where huge boulders are interspersed with the vegetation and alpine plants on which they like to feed.

To these recognized places of meeting a covey repairs at daybreak, the cocks separating and each taking up his position at some distance apart from the other. They then commence their croaking "a-r-r-r" to attract the notice of the hens, who reply at once with their plaintive "ee-ac," until one of the latter approaches to within a few paces of the rock on which a cock is standing with his neck stretched to its fullest extent and tail raised and expanded. Being now pleased with the success of his music, he turns round and round, and literally "spreads himself," to use an Americanism, until such time as he flies off the rock and commences the love-chase.

Ptarmigan do not fight nearly so much as Grouse or even Partridges, but a cock whose reiterated calls have received no response from the fair sex, often leaves his post and proceeds in search of a mate, of course having to trespass on the grounds of one of his adjacent rivals to do so. This is naturally resented at once by the rightful proprietor and a fight ensues, the various phases of which are similar to Grouse combats in their character. As often as not, the intruder gets the best of it, in which case the hen manifests no uneasiness as to her change of masters, and rather enjoys the fight while it lasts, running round and round the combatants uttering her one querulous cry.

The pairing-season being over by the middle of May, the hen selects her nesting-place, which is jealously guarded by the male.

Whilst camping in Iceland in 1889, I spent three months in the "Myvatn" district, which is by far the wildest and grandest part of that otherwise uninteresting island of trackless lava-beds and hot springs; there I had ample opportunities of studying the habits of the Ptarmigan. They are there in certain localities, notably round the "Fly Lake," quite as numerous as Grouse are on a well-stocked moor; broods could be seen every few minutes, running out of the way of the ponies, and when full-grown would rise singly from beneath the feet of the person who disturbed them. At the end of June I often came on hens with their young still in down, and on one approaching to within a few feet, the old bird gave a warning cry and the whole of the youngsters separated at once and rushed off like so many little mice to hide themselves under tufts of grass, or, if in the open, to crouch close to the ground with outstretched neck, in which position it is most difficult to distinguish their tiny forms and avoid treading upon them. Even though I sat perfectly still amongst the hidden family, it was always ten minutes or more before the hen would cease her shammed lameness and real distress, and quickly endeavour to collect her scattered belongings. The latter then rose suddenly to their feet and scurried off towards her as hard as their little legs could carry them.

The old cocks were generally shy when found as bachelors, but as benedicts they were all that the most devoted husbands should be, for if within call when their wives and families were threatened they would come flying boldly towards the aggressor, as if to attack him, and never sheered out of his way until within a foot or two, when they would alight suddenly on the nearest stones and be as persistent as the hens themselves in attracting attention or, more properly, in imparting fear.



A HIGHLAND PASTORAL.



"HUNTED"

A man must needs be either an excessively keen hunter for a bag or a very indifferent shot to render a whole day's Ptarmigan shooting in this part of Iceland either exciting or instructive, for in August they are so numerous and tame that in order to shoot them they must be literally kicked up, and even then they seldom take flights to such a distance that the covey cannot be marked down again.

Of all the Ptarmigan found in Europe and North America, the Icelandic form more closely resembles our own, much more so even than the "Fjall Ripa" of Norway, whose similarity one would imagine, from the proximity of that country to Scotland, would necessarily be much greater. Such, however, is not the case, the Scandinavian bird being larger and differing in other respects; whereas the Icelandic form resembles ours so closely that, but for a greater inclination to a browner colour on the part of the male in summer, the two birds are almost identical. The flight of the Icelandic birds is not so rapid or changeable as ours; but the former prefer tracts of boggy moorland or high plateaux rather than steep rocky hillsides; and this dissimilarity in the nature of the ground over which they pass is sufficient to account for the difference in flight. A Caithness or a Yorkshire Grouse seldom squirms and twists as does his kindred when driven from a rocky and precipitous mountain-top in any of the Highland counties.

The long and still summer nights of "Myvatn" are not ones to be remembered with enthusiasm by the sportsman, traveller, native, or any one who values the delights of unbroken rest after a hard day, and unless he happens to be blessed with the temper of an angel and the hide of a rhinoceros he had better not go there. The terrible pest of the country is an insect, half mosquito, half house-fly, having all the powers of inflicting wounds, with something added, of the former, and the disgusting aggressiveness and familiarity of the latter, and unless the sufferer consents to wear a green gauze veil covering his head and fastening tightly at the neck, so that all attacks on the face are entirely prevented, he will have no peace. This preventive naturally debars the wearer from taking pleasure in any form of sport, and therefore nine people out of ten prefer to suffer in comparative silence, and arrive in camp in the evening with a face like a lobster. As the evening approached and the sun sank down to the horizon in a blaze of glory, so departed our little tormentors for a while. But not so the effect of their thousand stings, and when one retired to bed it was not to rest but to toss feverishly on what seemed a red-hot pillow, until at last, if fortunate, one dropped into a fitful and unrefreshing slumber that did not last long. In one camp on the "Skafandi Laxa" I never slept a wink for four nights, but used to lie awake and listen in the death-like stillness to the murmur of the far-off river and the bubbling cry of the Whimbrel, a sound that seems to the traveller in Iceland to be universal, for one hears it everywhere, as it ceases not day or night. Then, about 1 o'clock, the first morning "Ptarr" of a cock Ptarmigan sounded faintly far away up on the moorland behind, and was repeated with others, gradually growing more distinct; one knew they were coming down to the rocks above the river and to bask in the first rays of the morning sun. Though vainly endeavouring to court slumber, such were the regularity of the calls with their gradual crescendos that you could not help listening to them, in spite of better resolutions, till at last one began to calculate how far off the bird was that last called and when he was going to repeat it again. There was no way of settling such an argument but by going and seeing for one's self, which was just what I used to do. At this time of the day the Ptarmigan cocks were very tame, and would allow me to crawl up to within a few feet of them and sit on the same rock, a familiarity they would not have permitted during the later hours of the day.

It is a regular habit of the cock Ptarmigan during the summer months to leave the high

grounds before daybreak, and gradually proceed down the slopes until the lowest ground to which they descend is reached. In this country this level is generally about 1500 feet, and though in ascending the hills in pursuit of these birds one does not find them, as a rule, so low, there is unmistakable evidence of their having been there recently, by the presence of their feathers and droppings. Like Grouse, they prefer to make their morning and evening meals on ground that is lower than that on which they rest during the day.

Ptarmigan are as much affected by the weather as Grouse are, and though they are not at all shy by nature, yet a really wet or stormy day makes them unapproachable, as the latter would be under the same conditions. But on a fine day, provided the birds are fairly numerous, it only requires good eyesight to make a bag. Ptarmigan have a habit, when they first observe a human being, of standing perfectly motionless in an erect position; and as in the autumn their plumage so exactly harmonizes with their surroundings, it is very difficult for even the most practised eye to discover them. Generally they squat, and the gunner requires a really steady old pointer or setter to work for him, one that has been well shot over and has no tendency to creep, even if the birds are running within a few feet of his nose. But the birds themselves frequently direct the attention of the sportsman by some old cock croaking as he approaches or passes by. This old fellow is the parent of the brood, and when the covey crouch he maintains the highest position on the rock or ground on which they are lying and is always the first to rise.

When rising, it is very unusual for any of the covey to be left behind. On the old cock taking wing and crowing, the rest immediately obey his signal and start off at once, flying in a more scattered formation than Grouse, unless the sportsman disturbs them up wind, when they rise all together and generally "bunch" as they turn, down or up wind, as the case may be, so that a good shot can usually get a brace with his right barrel if put in at the proper moment. It has always struck me as being curious why Highlanders, who are always such good sportsmen, should be so very keen on one's shooting at Ptarmigan when sitting on the ground. Their idea is not one of slaughter, for it has always been considered perfectly legitimate sport to do so; but why these unfortunate birds should be killed in a manner no sportsman would ever think of using towards Grouse or Partridges certainly seems rather unfair, for it cannot possibly afford any amusement to the shooter, yet nine stalkers out of every ten, when the first covey of Ptarmigan are seen sitting on the rocks, will try and induce you to fire at them in this barbarous manner.

Owing to the wild nature of the ground which the birds inhabit, there are not more than two or three places in Scotland where driving is attempted or can be made at all successful—Gaick Forest is the best that I have heard of. In 1886 as many as twenty-seven brace were killed there in a single drive. Ptarmigan in flight travel at much the same rate as Grouse, but their powers of ascending a stiff incline are very much greater; this they will do with as much apparent ease as if they were going straight ahead, and in passing over chasms and abysses they often take sudden headers almost straight down-hill, if they have made up their minds to strike for some particular spot or to avoid guns ahead.

The infinite variety of the plumage of the Ptarmigan has ever been a subject of much discussion and comment amongst British ornithologists, but in reality it is not a very difficult question to settle, the only time during which it is at all confusing being towards the end of July. At that time many of the birds are well into their autumn moult, others having not commenced the casting of their summer feathers. During the last two years I have made the plumage of the Grouse

THE
FATAL
SHADOW.



J. G. Miller.



"THE SNOWY CARRIES."

and Ptarmigan a special study, and have found the changes of the two birds to be identical; but as the colours of the Ptarmigan are more striking to the eye they are consequently supposed to be more varied, whereas, in reality, they are not nearly so complicated as those of the Grouse. The reason for this is that Ptarmigan do not have the same three forms that the Grouse have. This is noticeable in the Grouse cocks by the red, the black, and the white, and in the hens by the spotted, the yellow, the red, and the black types. Now if the Ptarmigan had all these it would indeed be almost impossible to lay down any fixed rule for finding birds to correspond with the illustrations given.

By a careful examination of a very large series of birds, and by having two pairs of fresh-killed birds sent to me in every month throughout a whole year, I have deduced the following, namely:— That Ptarmigan have three distinct moults during the year, and that from the end of June to the middle of November, when the white dress is finally assumed, the feathers are in a constant state of change of colour. The following are the normal changes throughout the year:—

January.—The white plumage.

February.—The same. (In very early springs the first summer-plumage feathers begin to appear, always on the neck.)

March and April.—Summer plumage coming gradually in, the breast-feathers being the last to appear.

May.—The summer plumage quite complete by the last week of the month.

June.—Summer plumage. Males generally showing white tips to feathers.

July.—The white tips on back and breast of the male have now worn off the feathers, the breast being very black and whole plumage much darker, and in the female the whole plumage is more rusty and faded. During the last week of the month many of the blue-grey feathers of the autumn make their appearance and the feathers moult off the legs. This is the case with both the cock and the hen, but some specimens are far more advanced than others.

August.—A complete change of both cock and hen to blue-grey plumage of the autumn, the whole being complete about the 20th of this month. The hens sometimes retain a few of the faded summer-plumage feathers till the first week in September, most noticeably on the back and flanks. At the beginning of this month the head and neck are more or less dark with a brown tinge in both sexes, but by the end the whole bird has changed to a very much paler blue-grey, the black ribbings on the feathers becoming less distinct. At the end of the month the feet are covered with the new feathers, though short.

September.—The fading of the feathers in both male and female continues throughout the month, and the males exhibit a slight difference in the ground colouring of the back-feathers, some retaining the brownish tinge and others a pure blue-grey. In the brown-tinged birds the black markings on the feathers are always far less distinct than in the grey birds.

October.—The plumage of both sexes still continues fading, while the black markings become less and less distinct, till the middle of the month, when the first pure white feathers of the third moult make their appearance. These first show on the back and flanks of the birds, and gradually increase till by the end of the month both male and female have an equal proportion of both old and new feathers. The feet are by this time quite fully covered, the feathers having been gradually growing since the beginning of August.

November.—A few of the old feathers of the autumn remain on the back, and one or two on the head. Those on the back have, by the 15th of this month, become so pale that the small black markings across them can hardly be discerned, but those on the head and neck do not fade much. At this season most of the birds will have cast the last of these old feathers, and will stand complete in their new winter dress, in which they continue until the end of February.

December.—The different plumages noted in the preceding month may be more or less normal, but during this month many birds, especially the cocks, retain throughout the winter a large amount of the autumn feathers on the back. One that I received on December 31, 1890, from West Ross-shire, is figured as an example of this, and may be taken as a typical specimen, though somewhat dark. In December the average of pure white birds is about one in four, but in severe winters they vary materially, and all the birds may be pure white.

Of course in describing the various changes in the plumage of the Ptarmigan that take place during the different months there can be no fixed rule for saying that the bird will be in such and such a plumage to a day; but the rule will be found to be correct to within a fortnight of the time specified, which will give enough lateral range either way for the birds to be premature or late in their feather-casting, as that varies entirely according to the season. For instance, in winters commencing very severely with much snow, I have seen Ptarmigan in full winter plumage on November 1; and in mild and warm winters it is not at all unusual to see them retain one or two of the old autumn feathers on the back and neck throughout the entire season, and about the middle of February begin to put forth the first feathers of the summer.

Writing, however, on the subject of the plumages of birds is never very interesting to the general reader, who can learn more in a few seconds by looking carefully over illustrations. I can therefore only refer him to the coloured Plates at the beginning of this chapter on the Ptarmigan, and he can then judge for himself and analyze the various stages through which these interesting birds pass. I have taken especial care in giving examples of the whole series, so that none are omitted.

One would imagine that, from the close association and similarity of structure of the two species, Grouse and Ptarmigan would frequently be found breeding together; but such is far from the case. There is no perfectly authenticated instance of such a hybrid, and I have only given the illustration of this supposed cross because it is believed to be such by more than one eminent ornithologist. The bird possesses all the points that such a hybrid should have, the head and neck closely resembling the head of an autumn hen Ptarmigan, and the tail and tail-coverts being also alike, so that the bird is as likely as not to be a genuine hybrid of the two species. This bird was shot on the 1st of September, 1878, by Mr. W. Houston, a well-known veteran Highland sportsman. He killed it on the Ptarmigan-ground above his house at Kintadwill, Brora, Sutherland, as it was flying with a covey of Grouse. Afterwards he sent it to Professor Newton, of Cambridge, who placed it in the Museum of that town.

A very simple but highly ingenious trick was formerly much used in the Highlands by poachers for the capture of both Grouse and Ptarmigan. The device is well known amongst poachers, but very few keepers, or even the lairds themselves, are aware of its practice; and although in some parts of Ross-shire and Sutherland, when the snow is sufficiently deep and the birds consequently hungry, it is highly successful, and the chances of detection are small, it is to be wondered that it is not oftener practised.



"CORRIE GUISECHAN" THE BLACK MOUNT.



"GORGED."

I first heard of this mode of capturing the birds from my mother, who told me that, when a girl, she had often seen the poachers in Glenfinlass thus catching Grouse; but it was with some difficulty that I got all the necessary information from an old Highland poacher, well known in the neighbourhood of Inverness, who thoroughly explained it to me and described it in detail. On a well-stocked Grouse-moor, during a hard winter, when the snow fell early in November and covered the valleys to the proper depth for a month, he said he could easily lift a hundred brace before the close of the season, after which there was no sale for the birds. The fact of the season for Grouse ending on the 10th of December has done more to stop this form of poaching than anything, as there have been but few heavy falls of snow in recent years before the middle of that month.



MODE OF TRAPPING PTARMIGAN.

(Shown by a section cut in the side of a hill.)

The poacher discovers a place on the hill where the birds are in the habit of sitting when snow has fallen. To this spot he repairs when the downfall has ceased, and before night, if possible, so that the snow may be still soft and not frozen. He is armed with nothing but a bag of oats or corn and a beer or, better still, champagne bottle. Thus, having nothing of a suspicious nature in his possession, he would be allowed to pass, even though searched. Arrived on his ground, he proceeds to make a number of indentations in the snow with his bottle, and the bottom of the cavity, just within reach of the birds, he fills up with grain, and, scattering the rest of the contents of the bag near the holes on the surface, he departs, to return next morning and collect his plunder.

Unless a frost occurs the trick must necessarily be a failure, but if the cavity becomes properly hardened and the birds find the food, success is almost a certainty. A Grouse or Ptarmigan finding what to them is a great delicacy, immediately imparts the knowledge of its presence to others in the neighbourhood. They at once greedily devour all the grain that is lying around, and then turn their attention to obtaining the stores lying in the holes. Probably by straining their necks to the uttermost they may be able to reach a few grains; but this only serves to whet their appetites, and they must have more. Consequently they go on reaching till they eventually topple over into the hole, which just comfortably corresponds to their own size, and in which the more they struggle to extricate themselves the more firmly do they become wedged. When a bird is forced into a hole, even should the sides be smooth, it is not easily withdrawn, as the feathers resist being pulled backwards; but when the sides are rough the retention is doubly great, and the feeble strugglings of the unfortunate bird in its cramped position are not sufficient to enable it to escape.

The sectional sketch on p. 71 will give the reader a good idea of this mode of capture.



FINIS.

